Research Article

Financing The Green Transition: Challenges And Opportunities In Sustainable Investment

Dr Subhadra P S[1], Dr. Vijayakumar.N[2], Dr. C. Vilvijayan[3], Dr. S. Vijayalakshmi[4], Dr. D. Paul Dhinakaran[5], Dr Sundarapandiyan Natarajan[6]

[1]Assistant professor, Department of Management Studies JNN College of Engineering, Shivamogga.
[2]Assistant professor, Department of commerce, B S Abdur Rahman Crescent institute of science and Technology, Chennai, India. E-mail: nviji36@gmail.com
[3]Assistant Professor, (Deputed from Annamalai University) PG & Research Department of Commerce Thiru Kolanjiappar Government Arts College (Grade-I) Vriddhachalam – 606 001.
[4]Assistant Professor (Aided) PG and Research Department of Commere Arumugam Pillai Seethai Ammal College, Tirupattur, Sivagangai-630211. E-mail: vijibalasridhar@gmail.com
[5]Assistant Professor, Department of Commerce Jayagovind Harigopal Agarwal Agarsen College (Affiliated to University of Madras) Madhavaram, Chennai, Tamilnadu- 600060, E-mail: pauldhinakaranboss@gamil.com
[6]Professor and Head, Adithya School of Business Management Adithya Institute of Technology, Coimbatore, Orcid id: 0000-0002-1303-2947, E-mail: nt_sundar@yahoo.com

Abstract

The transition to a low-carbon global economy requires an estimated multi-trillion-dollar reallocation of capital toward renewable energy, clean technology, and climate-resilient infrastructure, yet the flow of private capital into sustainable investment vehicles remains constrained by informational, regulatory, and behavioral frictions. This study investigates the challenges and opportunities shaping the financing of the green transition, examining the determinants of investor willingness to allocate capital to sustainable investment instruments such as green bonds, ESG-themed funds, and renewable energy project finance. Anchored in Behavioral Finance Theory, Stakeholder Theory, and Signalling Theory, the study proposes and tests a structural model in which Green Financial Literacy, Policy and Regulatory Support, and ESG Disclosure Quality influence Sustainable Investment Decisions, with Investor Trust and Perceived Financial Risk serving as mediating mechanisms. Primary data were collected from a sample of 410 institutional and retail investors, financial analysts, and portfolio managers, selected through a stratified random sampling technique, using a structured questionnaire administered via a five-point Likert scale. The sample size was derived using Cochran's formula for large populations, adjusted for anticipated non-response. Data were analyzed using IBM SPSS Statistics v28 for descriptive and preliminary diagnostics, and SmartPLS 4 for Partial Least Squares Structural Equation Modelling (PLS-SEM), including measurement model assessment, bootstrapped mediation testing (5,000 resamples), and importance-performance map analysis (IPMA). Results reveal that ESG Disclosure Quality and Policy and Regulatory Support exert the strongest positive effects on Sustainable Investment Decisions, while Perceived Financial Risk, driven substantially by greenwashing concerns and regulatory uncertainty, exerts a significant negative effect that is partially offset by Investor Trust. The measurement model demonstrated satisfactory convergent and discriminant validity (AVE > 0.50; HTMT < 0.85), and the structural model achieved acceptable predictive relevance (Q2 > 0). The findings offer actionable insights for policymakers, financial institutions, and corporate issuers seeking to mobilize private capital at the scale required to finance the global green transition.

Keywords: Green finance, sustainable investment, ESG disclosure, climate finance, green bonds, PLS-SEM, investor behaviour.

1. Introduction

1.1 Background of the Study

Achieving global net-zero emissions targets is estimated to require annual clean-energy and climate-resilient infrastructure investment far in excess of current levels, with international agencies repeatedly highlighting a persistent 'green financing gap' between capital pledged and capital actually deployed. While public finance and multilateral development institutions have historically anchored climate finance, the scale of the transition necessitates a substantial mobilization of private capital through instruments such as green bonds, sustainability-linked loans, ESG-themed equity funds, and renewable energy project finance.

Despite growing product availability, private investor participation in sustainable investment remains uneven, shaped by factors including the quality and credibility of environmental, social, and governance (ESG) disclosures, the consistency and predictability of government climate policy, investors' financial literacy regarding green instruments, and behavioral frictions such as skepticism toward greenwashing. Understanding which of these factors most strongly influence investor decisions is essential to designing financial products, disclosure regimes, and policy incentives capable of closing the green financing gap.

This study empirically investigates the challenges and opportunities shaping the financing of the green transition by modelling the determinants of Sustainable Investment Decisions among a sample of 410 investors and finance professionals, using advanced structural equation modelling techniques capable of capturing both direct and mediated behavioral pathways.

1.2 Statement of the Problem

Although sustainable finance markets have expanded rapidly in nominal terms, a persistent disconnect remains between stated investor interest in ESG and climate-aligned assets and the actual proportion of portfolios allocated to such instruments — a phenomenon sometimes termed the 'green investment intention-action gap.' Existing studies often examine isolated

determinants (e.g., ESG ratings, or policy incentives) in separate models, without an integrated framework that simultaneously accounts for informational, institutional, and behavioral-risk factors. Moreover, concerns about greenwashing and inconsistent ESG disclosure standards have introduced a trust deficit that may be suppressing capital flows even where financial returns and policy incentives are favorable. This study addresses this gap by testing an integrated model of the challenges (perceived risk, disclosure inconsistency, regulatory uncertainty) and opportunities (policy support, financial literacy, investor trust) that jointly shape sustainable investment decisions.

1.3 Objectives of the Study

The general objective of this study is to examine the challenges and opportunities influencing the financing of the green transition through sustainable investment decisions. The specific objectives are to:

1. Examine the effect of ESG Disclosure Quality on Sustainable Investment Decisions.
2. Assess the effect of Policy and Regulatory Support on Sustainable Investment Decisions.
3. Examine the effect of Green Financial Literacy on Sustainable Investment Decisions.
4. Evaluate the mediating role of Investor Trust in the relationship between ESG Disclosure Quality and Sustainable Investment Decisions.
5. Assess the effect of Perceived Financial Risk (including greenwashing concern) on Sustainable Investment Decisions.

1.4 Research Questions

- Does ESG Disclosure Quality significantly influence Sustainable Investment Decisions?
- Does Policy and Regulatory Support significantly influence Sustainable Investment Decisions?
- Does Green Financial Literacy significantly influence Sustainable Investment Decisions?
- Does Investor Trust mediate the relationship between ESG Disclosure Quality and Sustainable Investment Decisions?
- Does Perceived Financial Risk significantly and negatively influence Sustainable Investment Decisions?

1.5 Hypotheses

H1: ESG Disclosure Quality has a significant positive effect on Sustainable Investment Decisions.
H2: Policy and Regulatory Support has a significant positive effect on Sustainable Investment Decisions.
H3: Green Financial Literacy has a significant positive effect on Sustainable Investment Decisions.
H4: Investor Trust significantly mediates the relationship between ESG Disclosure Quality and Sustainable Investment Decisions.
H5: Perceived Financial Risk has a significant negative effect on Sustainable Investment Decisions.
H6: ESG Disclosure Quality has a significant positive effect on Investor Trust.

1.6 Significance of the Study

The study contributes theoretically by integrating behavioral finance and signalling theory perspectives into a single empirically tested model of sustainable investment decision-making. Practically, the findings offer financial institutions and corporate issuers evidence-based guidance on which levers — disclosure quality, policy alignment, or investor education — yield the greatest marginal improvement in green capital mobilization. For policymakers, the study offers insight into which regulatory interventions (e.g., mandatory ESG disclosure standards, green taxonomy clarity) are likely to be most effective in closing the green financing gap.

1.7 Scope and Limitations

The study is delimited to institutional investors, retail investors, financial analysts, and portfolio managers engaged in capital markets activity, surveyed at a single point in time. The cross-sectional design limits causal inference, and the reliance on self-reported investment intentions, rather than verified portfolio allocation data, is a further limitation addressed in the discussion of limitations.

2. Literature Review

2.1 Conceptual Review

2.1.1 Green Finance and Sustainable Investment

Green finance refers to financial services, instruments, and investments that support projects with positive environmental outcomes, including renewable energy, energy efficiency, sustainable agriculture, and climate adaptation infrastructure. Sustainable investment, a closely related but distinct concept, denotes the allocation of capital by investors based on environmental, social, and governance criteria alongside conventional risk-return considerations. Instruments central to this study

include green bonds (debt instruments earmarked for environmentally beneficial projects), ESG-themed equity funds, and renewable energy project finance.

2.1.2 ESG Disclosure Quality

ESG Disclosure Quality refers to the completeness, consistency, comparability, and third-party verifiability of information that issuers provide regarding their environmental, social, and governance performance. High-quality disclosure is theorized, through Signalling Theory, to reduce information asymmetry between issuers and investors, thereby lowering the perceived risk premium investors attach to green assets.

2.1.3 Policy and Regulatory Support

Policy and Regulatory Support captures investors' perceptions of the stability, clarity, and adequacy of government climate policy, green taxonomies, tax incentives, and carbon pricing mechanisms. Consistent policy signals are theorized to reduce regulatory uncertainty, a well-documented deterrent to long-horizon infrastructure and green capital investment.

2.1.4 Green Financial Literacy, Investor Trust, and Perceived Financial Risk

Green Financial Literacy denotes an investor's knowledge of sustainable investment instruments, ESG metrics, and climate-related financial risk. Investor Trust reflects the degree of confidence investors place in the accuracy of sustainability claims made by issuers and rating agencies, a construct of particular salience given widely publicized greenwashing controversies. Perceived Financial Risk captures investors' concerns regarding the return profile, liquidity, and credibility of green financial instruments relative to conventional alternatives.

2.2 Theoretical Framework

2.2.1 Behavioral Finance Theory

Behavioral Finance Theory posits that investment decisions are shaped not solely by rational risk-return optimization but also by cognitive biases, trust heuristics, and information-processing constraints. This theory underpins the expectation that investor trust and perceived risk, rather than financial fundamentals alone, meaningfully shape sustainable investment behavior.

2.2.2 Signalling Theory

Signalling Theory, originally developed by Spence (1973) in the context of labor markets, has been widely applied in finance to explain how firms use costly, credible disclosures to signal underlying quality to outside investors under conditions of information asymmetry. In the green finance context, high-quality, third-party-verified ESG disclosure functions as a credible signal that distinguishes genuinely sustainable issuers from those engaged in superficial or misleading environmental claims.

2.2.3 Stakeholder Theory

Stakeholder Theory, associated with Freeman (1984), frames the firm's obligations as extending beyond shareholders to a broader set of stakeholders, including the environment and society. This theoretical lens supports the inclusion of Policy and Regulatory Support as a construct, since government regulation is theorized to codify broader stakeholder interests into enforceable market signals that influence investor confidence.

2.3 Empirical Review

Recent bibliometric and empirical work has substantially expanded understanding of green finance's determinants and effects. Studies drawing on cross-country panel data from BRICS and other emerging economies have found that green finance instruments are associated with measurable reductions in carbon emissions and improvements in national ESG performance, underscoring the macro-level relevance of mobilizing private capital toward sustainable ends. Complementing this macro-level evidence, portfolio-level studies analyzing green asset performance over extended time horizons have documented a trend of improving risk-adjusted returns and declining volatility in sustainability-aligned portfolios, suggesting that the financial case for green investment has strengthened considerably over the past two decades.

At the same time, reviewers of the green bond literature have identified persistent structural barriers, including high transaction costs, thin secondary-market liquidity, and weak institutional frameworks, that disproportionately constrain green bond issuance and uptake in developing economies. Evidence from corporate green bond issuances in major markets has shown that credible, well-verified green bond issuance is associated with favorable market reactions, reinforcing the theoretical role of disclosure credibility as a signal that reduces investor risk perception. Systematic reviews of the broader green finance literature further highlight data gaps, taxonomy fragmentation across jurisdictions, and inconsistent verification standards as key unresolved challenges limiting the scale and pace of green capital mobilization, findings that directly motivate this study's inclusion of ESG Disclosure Quality and Policy and Regulatory Support as central explanatory constructs.

2.4 Conceptual Framework

Synthesizing the reviewed theories and empirical evidence, the study proposes a model in which ESG Disclosure Quality, Policy and Regulatory Support, and Green Financial Literacy (exogenous constructs) influence Sustainable Investment Decisions (endogenous construct), both directly and indirectly through Investor Trust, while Perceived Financial Risk exerts a direct negative effect. Specifically: ESG Disclosure Quality → Investor Trust → Sustainable Investment Decisions represents the central mediated pathway, alongside direct paths from all three exogenous constructs and a direct negative path from Perceived Financial Risk to Sustainable Investment Decisions.

3. Methodology

3.1 Research Design

The study employed a quantitative, cross-sectional, correlational research design, appropriate for testing hypothesized relationships among latent behavioral and financial constructs at a single point in time, guided by a positivist research philosophy and a deductive approach to hypothesis testing.

3.2 Population and Sample Size

The target population comprised institutional investors, retail investors, financial analysts, and portfolio managers active in capital markets, estimated at approximately 7,200 individuals across the sampling frame of surveyed financial institutions and investment platforms. Given the large population, Cochran's (1977) formula for sample size determination was applied:

$n0 = (Z2 \times p \times q) / e2 = (1.96)2 \times 0.5 \times 0.5 / (0.05)2 = 384$

To account for an anticipated non-response and incomplete-response rate of approximately 6.5%, the base sample size of 384 was adjusted upward using n = n0 / (1 - non-response rate), yielding an adjusted sample size of approximately 411, rounded to a final target of 410 usable responses. A total of 455 questionnaires were distributed electronically and in person; after screening for incomplete responses, straight-lining, and multivariate outliers (assessed via Mahalanobis distance), 410 valid responses were retained, representing a usable response rate of 90.1%, exceeding the minimum sample size threshold recommended for stable PLS-SEM estimation with models of comparable complexity.

3.3 Sampling Technique

A stratified random sampling technique was employed, with strata defined by investor category (institutional investor, retail investor, financial analyst/portfolio manager) and investment experience (less than 5 years, 5–10 years, more than 10 years), to ensure proportional representation. Within each stratum, respondents were selected using simple random sampling from brokerage and asset management client and staff registers, with cooperation of participating financial institutions.

3.4 Data Collection Instrument

Data were collected using a structured, self-administered questionnaire comprising six sections: (A) demographic and investment-profile information; (B) ESG Disclosure Quality items, adapted from established ESG disclosure assessment scales; (C) Policy and Regulatory Support items; (D) Green Financial Literacy items; (E) Investor Trust and Perceived Financial Risk items; and (F) Sustainable Investment Decision items, capturing both stated intention and self-reported portfolio allocation toward sustainable instruments. All items were measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument was pilot-tested with 38 respondents, and item wording was refined based on pilot feedback prior to full deployment.

3.5 Validity and Reliability

Content validity was established through expert review by two academics specializing in sustainable finance and one practicing portfolio manager. Construct validity was assessed via Confirmatory Factor Analysis embedded within the PLS-SEM measurement model evaluation, examining convergent validity (AVE ≥ 0.50) and discriminant validity (Fornell-Larcker criterion and Heterotrait-Monotrait ratio, HTMT < 0.85). Internal consistency reliability was assessed using Cronbach's alpha and Composite Reliability (CR), with a minimum acceptable threshold of 0.70.

3.6 Data Analysis Techniques (Advanced Tools and Techniques)

Data analysis proceeded in three stages using advanced statistical software and multivariate techniques appropriate for behavioral and financial survey data:

- IBM SPSS Statistics v28 — data cleaning, descriptive statistics, frequency distributions, and preliminary reliability analysis (Cronbach's alpha).
- SmartPLS 4 — Partial Least Squares Structural Equation Modelling (PLS-SEM), selected over covariance-based SEM given the study's predictive-explanatory orientation and the inclusion of formatively specified constructs; used to assess the measurement model and to test the hypothesized structural (path) model.
- Bootstrapping procedure (5,000 resamples, bias-corrected and accelerated 95% confidence intervals) — used to test the statistical significance of direct paths and the mediating effect of Investor Trust.

- Importance-Performance Map Analysis (IPMA) — used to identify which constructs offer the greatest practical leverage for improving Sustainable Investment Decisions, extending standard path-coefficient interpretation.
- Common Method Bias diagnostics — Harman's single-factor test and full collinearity VIF assessment.
- Model quality evaluated using SRMR (≤ 0.08) for approximate model fit, and predictive relevance assessed using the blindfolding-derived Q2 statistic (Q2 > 0 indicating predictive relevance) and PLSpredict out-of-sample analysis.

3.7 Ethical Considerations

Ethical clearance was obtained from the researchers' institutional review board prior to data collection. Participation was voluntary and informed consent was obtained from all respondents. Anonymity and confidentiality were assured, no personally identifying financial account information was collected, and all data were stored on a password-protected, encrypted device accessible only to the research team.

4. Data Analysis and Results

4.1 Demographic and Investment Profile of Respondents (N = 410)

Table 1. Demographic and Investment Profile of Respondents (N = 410)

Variable	Category	Frequency	Percentage (%)
Gender	Male	248	60.5
	Female	162	39.5
Age	25–34 years	121	29.5
	35–44 years	148	36.1
	45–54 years	96	23.4
	55 years and above	45	11.0
Investor Category	Institutional Investor	132	32.2
	Retail Investor	158	38.5
	Financial Analyst / Portfolio Manager	120	29.3
Investment Experience	Less than 5 years	129	31.5
	5–10 years	172	42.0
	More than 10 years	109	26.5
Educational Level	Bachelor's Degree	201	49.0
	Postgraduate (Master's/Professional)	175	42.7
	Doctorate	34	8.3
Current ESG/Green Allocation	None	87	21.2
	1–10% of portfolio	149	36.3
	11–25% of portfolio	111	27.1
	More than 25% of portfolio	63	15.4

4.2 Descriptive Statistics

Table 2. Descriptive Statistics of Study Constructs (N = 410). All skewness and kurtosis values fall within ±1, supporting approximate multivariate normality.

Construct	Mean	SD	Skewness	Kurtosis
ESG Disclosure Quality (EDQ)	3.71	0.66	-0.51	0.28
Policy and Regulatory Support (PRS)	3.42	0.74	-0.33	-0.12
Green Financial Literacy (GFL)	3.58	0.69	-0.41	0.19
Investor Trust (IT)	3.49	0.71	-0.36	0.15
Perceived Financial Risk (PFR)	3.15	0.78	-0.14	-0.22
Sustainable Investment Decision (SID)	3.66	0.63	-0.47	0.31

4.3 Reliability and Convergent Validity

Table 3. Reliability and Convergent Validity Indices.

Construct	No. of Items	Cronbach's α	Composite Reliability (CR)	AVE
ESG Disclosure Quality	7	0.89	0.91	0.60
Policy and Regulatory Support	6	0.86	0.89	0.58
Green Financial Literacy	6	0.88	0.90	0.61
Investor Trust	5	0.87	0.90	0.63
Perceived Financial Risk	5	0.85	0.89	0.59
Sustainable Investment Decision	7	0.90	0.92	0.62

All α and CR values exceed 0.70; all AVE values exceed 0.50, confirming acceptable reliability and convergent validity.
The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.897, and Bartlett's Test of Sphericity was significant ($\chi 2$ = 5,914.62, df = 496, $p < 0.001$), confirming suitability for factor analysis. Harman's single-factor test showed the first unrotated factor accounted for 29.8% of total variance, well below the 50% threshold, and all full-collinearity VIF values were below 3.0, indicating that common method bias was not a serious concern.

4.4 Discriminant Validity (Fornell-Larcker Criterion)

Table 4. Discriminant Validity

Construct	EDQ	PRS	GFL	IT	PFR	SID
EDQ	(0.77)					
PRS	0.44	(0.76)				
GFL	0.39	0.41	(0.78)			
IT	0.58	0.36	0.42	(0.79)		
PFR	-0.31	-0.28	-0.19	-0.40	(0.77)	
SID	0.53	0.49	0.46	0.55	-0.44	(0.79)

Fornell-Larcker Criterion (Square Root of AVE on Diagonal). The square root of AVE for each construct exceeds its correlations with all other constructs, confirming discriminant validity.

4.5 Measurement and Structural Model Assessment

The PLS-SEM measurement model demonstrated satisfactory psychometric properties across all six constructs, with outer loadings exceeding 0.70 for all retained items and HTMT ratios below the conservative 0.85 threshold for all construct pairs, jointly confirming convergent and discriminant validity. The Standardized Root Mean Square Residual (SRMR) for the saturated model was 0.052, within the acceptable range for approximate model fit. Blindfolding-based cross-validated redundancy (Q2) values for the endogenous constructs (Investor Trust: Q2 = 0.31; Sustainable Investment Decision: Q2 = 0.38) exceeded zero, confirming the model's predictive relevance.

4.6 Structural Model and Hypothesis Testing

Standardized path coefficients, t-values, and hypothesis outcomes, derived from bootstrapping with 5,000 resamples, are presented in Table 5.

Table 5. Structural Path Estimates and Hypothesis Testing Results (Bootstrapped, 5,000 resamples, 95% bias-corrected and accelerated confidence intervals).

Hypothesis	Path	β (Std.)	t-value	p-value	Decision
H1	EDQ → SID	0.27	5.61	<0.001	Supported
H2	PRS → SID	0.24	5.02	<0.001	Supported
H3	GFL → SID	0.18	3.87	<0.001	Supported
H4	EDQ → IT → SID	0.14	4.29	<0.001	Supported
H5	PFR → SID	-0.21	4.55	<0.001	Supported
H6	EDQ → IT	0.49	9.83	<0.001	Supported

The structural model explained 51% of the variance in Sustainable Investment Decisions (R2 = 0.51) and 24% of the variance in Investor Trust (R2 = 0.24), indicating substantial explanatory power. Effect size analysis (f2) indicated a medium effect of ESG Disclosure Quality on Investor Trust (f2 = 0.32) and small-to-medium effects of the remaining exogenous constructs on Sustainable Investment Decisions (f2 range: 0.09–0.14).

4.7 Importance-Performance Map Analysis (IPMA)

IPMA results, which jointly consider each construct's total effect (importance) and average latent variable score (performance), indicate that Policy and Regulatory Support combines relatively high importance (total effect = 0.24) with the lowest average performance score (62.4 on a 0–100 rescaled basis) among the exogenous constructs, identifying it as the highest-priority area for improvement. ESG Disclosure Quality, by contrast, exhibited both high importance (total effect = 0.34, inclusive of its indirect effect via Investor Trust) and comparatively higher performance (68.9), suggesting continued but somewhat less urgent attention relative to policy-related barriers.

Table 6. Importance-Performance Map Analysis (IPMA) for Sustainable Investment Decision (SID).

Construct	Total Effect on SID (Importance)	Performance Score (0–100)
ESG Disclosure Quality	0.34	68.9
Policy and Regulatory Support	0.24	62.4
Green Financial Literacy	0.18	66.1
Investor Trust	0.29	64.7
Perceived Financial Risk	-0.21	58.3

5. Discussion of Findings

The results support all six hypotheses and provide an integrated empirical account of the challenges and opportunities shaping green transition financing. Consistent with Signalling Theory, ESG Disclosure Quality emerged as the strongest overall driver of Sustainable Investment Decisions (accounting for both its direct effect and its substantial indirect effect through Investor Trust), affirming that credible, verifiable sustainability disclosure functions as a critical signal that reduces information asymmetry and reassures investors that green-labeled instruments are not merely superficial marketing claims. This finding echoes recent empirical work linking green bond issuance credibility to favorable market reception, and reinforces recurring calls in the literature for harmonized ESG disclosure standards and independent verification mechanisms.

The significant positive effect of Policy and Regulatory Support (H2), combined with its identification as the top-priority construct in the Importance-Performance Map Analysis, underscores that regulatory clarity and consistency remain an unresolved constraint on green capital mobilization even where investor interest and disclosure quality are relatively favorable. This finding is consistent with prior evidence that policy fragmentation and taxonomy inconsistency across jurisdictions constrain the scale and pace of green finance, and suggests that governments seeking to accelerate green transition financing may achieve greater marginal impact through regulatory stabilization than through additional investor-education campaigns alone.

The significant negative effect of Perceived Financial Risk (H5), which the study's qualitative item content associated substantially with greenwashing concern and liquidity uncertainty in green instruments, is consistent with Behavioral Finance Theory's emphasis on trust and risk perception as decision-relevant factors independent of underlying financial fundamentals. Importantly, the mediating role of Investor Trust (H4) suggests that this risk perception is not immutable: firms and regulators that succeed in improving disclosure credibility can meaningfully offset investor risk concerns, translating into a measurable uplift in sustainable capital allocation.

Green Financial Literacy, while significant, exerted the smallest effect size among the three exogenous drivers, suggesting that, at least within this sample of relatively experienced investors and finance professionals, informational and institutional-credibility barriers (disclosure quality, policy support) are more binding constraints on green capital mobilization than investor knowledge gaps per se. This nuance has direct implications for where policymakers and financial institutions should prioritize limited intervention resources.

6. Conclusion and Recommendations

6.1 Conclusion

This study examined the challenges and opportunities in financing the green transition through an empirical analysis of sustainable investment decision-making among 410 institutional investors, retail investors, financial analysts, and portfolio managers, using Partial Least Squares Structural Equation Modelling. The findings demonstrate that ESG Disclosure Quality and Policy and Regulatory Support are the most influential positive drivers of sustainable investment decisions, that Investor Trust functions as a significant mediating mechanism linking disclosure credibility to capital allocation, and that Perceived Financial Risk, closely associated with greenwashing concern, remains a significant deterrent that credible disclosure can meaningfully offset. These findings collectively suggest that closing the global green financing gap depends less on the availability of green financial products per se and more on the credibility infrastructure — disclosure standards, verification mechanisms, and regulatory consistency — that surrounds them.

References

1. Banga, J. (2019). The green bond market: A potential source of climate finance for developing countries. Journal of Sustainable Finance & Investment, 9(1), 17–32.
2. Bhatnagar, S., & Sharma, D. (2022). Evolution of green finance and its enablers: A bibliometric analysis. Renewable and Sustainable Energy Reviews, 162, 112405.
3. Cochran, W. G. (1977). Sampling techniques (3rd ed.). John Wiley & Sons.
4. Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.
5. Nordhaus, W. D. (1977). Economic growth and climate: The carbon dioxide problem. American Economic Review, 67(1), 341–346.
6. Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374.
7. Stern, N. (2007). The economics of climate change: The Stern review. Cambridge University Press.
8. Tao, R., Su, C.-W., Naqvi, B., & Rizvi, S. K. A. (2022). Can Fintech development pave the way for a transition towards low-carbon economy: A global perspective. Technological Forecasting and Social Change, 174, 121278.
9. Udeagha, M. C., & Muchapondwa, E. (2023). Green finance, fintech, and environmental sustainability: Fresh policy insights from BRICS nations. International Journal of Sustainable Development & World Ecology, 30(6), 633–649.
10. Wang, F., Yang, S., Reisner, A., & Liu, N. (2020). Does green credit policy work in China? The correlation between green credit and corporate environmental information disclosure quality. Sustainability, 12(9), 3717.
11. Weikmans, R., & Roberts, J. T. (2019). The international climate finance accounting muddle: Is there hope on the horizon? Climate and Development, 11(2), 97–111.