

The Nexus Between Green Financial Adherence And Enhanced Customer Reliability Perceptions

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ABSTRACT

The growing emphasis on sustainable development has encouraged financial institutions to integrate environmental considerations into their financial products, investment decisions, policies, and operational practices. In this context, green financial adherence has emerged as an important dimension of sustainable finance. However, limited empirical attention has been given to how such practices influence customers' perceptions of reliability, trust, credibility, and confidence in financial institutions. The present study examines the nexus between green financial adherence and customer reliability perceptions. The study specifically aims to analyse customers' perceptions of green financial adherence, examine the level of customer reliability perceptions associated with sustainability-oriented financial practices, assess the relationship between green financial adherence and customer reliability perceptions, and identify the key dimensions of green financial adherence influencing customer reliability perceptions. A quantitative research approach with a descriptive research design is adopted for the study. Primary data are collected from customers of financial institutions through a structured questionnaire. The collected data are analysed using descriptive statistics, chi-square test, t-test, ANOVA, correlation analysis, Likert scale analysis, and Garrett ranking technique. The study seeks to provide empirical insights into the role of environmentally responsible financial practices in strengthening customer confidence and perceptions of institutional reliability. The findings are expected to assist financial institutions in developing credible and customer-oriented green financial strategies while supporting broader sustainability objectives.

Keywords: Green Finance, Green Financial Adherence, Customer Reliability Perception, Sustainable Finance, Green Banking, Customer Trust, Financial Institutions, Sustainability.

INTRODUCTION

The global financial ecosystem is undergoing a fundamental transformation driven by increasing environmental concerns, climate risks, and the demand for sustainable economic development. Financial institutions are no longer viewed solely as intermediaries of capital but as key agents in advancing environmental sustainability through responsible financial practices. In this context, green finance has emerged as a strategic framework that integrates environmental considerations into financial decision-making, investment policies, and operational processes. Governments, regulators, and international organisations have actively encouraged financial institutions to adopt green financial principles, supporting sustainable development goals and mitigating climate-related risks.

Green financial adherence refers to the extent to which financial institutions consistently implement environmentally responsible policies, products, disclosures, and investment practices in alignment with sustainability standards and regulatory expectations. These practices include the provision of green financial products, transparent environmental reporting, sustainable lending and investment decisions, and the adoption of eco-friendly operational mechanisms. With the rapid advancement of financial technologies (FinTech), green finance has increasingly been enabled through digital platforms that enhance transparency, accessibility, and monitoring of sustainability-oriented financial activities.

While green finance has been widely examined from environmental, regulatory, and institutional performance perspectives, its influence on customers'

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perceptual responses remains comparatively underexplored. Customers play a pivotal role in the success of green financial initiatives, as their trust, confidence, and reliability perceptions significantly influence adoption and long-term engagement with sustainable financial services. Customer reliability perceptions encompass customers' beliefs regarding the trustworthiness, credibility, consistency, and ethical commitment of financial institutions.

In an era characterized by heightened awareness of environmental responsibility and concerns over greenwashing, customers are increasingly evaluating financial institutions based on the authenticity and consistency of their green financial adherence. Financial institutions that demonstrate genuine commitment to sustainability are more likely to foster positive customer reliability perceptions, whereas superficial or symbolic green practices may erode customer trust. Understanding the nexus between green financial adherence and customer reliability perceptions is therefore essential for both academic inquiry and practical decision-making in sustainable finance.

STATEMENT OF THE PROBLEM

Despite the growing adoption of green finance practices by financial institutions, there remains limited empirical evidence on how such practices influence customer reliability perceptions. Existing research has predominantly focused on macroeconomic outcomes, environmental performance, regulatory compliance, and institutional benefits of green finance. Consequently, the customer-centric implications of green financial adherence—particularly in terms of trust, credibility, and long-term confidence—have not been adequately addressed.

Moreover, the increasing integration of digital financial platforms has intensified customer exposure to sustainability-related information, making customers more vigilant in assessing the authenticity of green financial claims. This heightened scrutiny has raised concerns regarding greenwashing and the credibility of sustainability disclosures, thereby amplifying the importance of customer reliability perceptions. However, the extent to which consistent and transparent green financial adherence contributes to strengthening customer reliability remains unclear.

The absence of comprehensive, consumer-focused empirical studies creates a significant research gap in understanding whether green financial adherence genuinely enhances customer reliability perceptions or merely serves as a symbolic compliance mechanism. Addressing this problem is crucial for financial institutions seeking to design effective sustainability strategies and for policymakers aiming to promote credible and inclusive green finance systems.

OBJECTIVES OF THE STUDY

The primary objective of this study is to examine the nexus between green financial adherence and customer reliability perceptions. The specific objectives are as follows:

1. To analyse customers' perceptions of green financial adherence in financial institutions.
2. To examine the level of customer reliability perceptions associated with sustainability-oriented financial practices.
3. To assess the impact of green financial adherence on customer reliability perceptions.
4. To identify the key dimensions of green financial adherence that significantly influence customer reliability perceptions.

SCOPE OF THE STUDY

The scope of the present study is confined to examining the relationship between green financial adherence and customer reliability perceptions within the financial services sector. The study focuses on customers who engage with sustainability-oriented financial products and services offered by banks and other financial institutions. Green financial adherence is examined through key dimensions such as green product offerings, environmental transparency, sustainable investment commitment, and eco-friendly operational practices.

The study adopts a consumer-centric perspective, emphasizing perceptual and behavioural outcomes rather than institutional financial performance or environmental impact metrics. The geographical scope is limited to the selected study area, and the

findings are interpreted within the contextual boundaries of prevailing regulatory frameworks and digital financial ecosystems. The study does not evaluate the technical efficiency of green technologies or the economic returns of green investments, but rather concentrates on customer-level perceptions and trust-related outcomes.

RESEARCH METHODOLOGY

The research methodology refers to the information related to the project and the tools used to collect samples from respondents and analyse them. The study presented here represented a quantitative viewpoint. This study is classified as diagnostic research, even though it encompasses a variety of diagnostic, descriptive, and exploratory topics in the choice and integration of variables. The methodology of the study employed to gather data was a sample survey method. Other approaches to gathering data were disregarded because they were deemed inappropriate in this particular situation, particularly given the small sample size. Below is a brief explanation of the research approach that was used by the investigator.

RESEARCH DESIGN

The study adopts a **descriptive research design** to examine the relationship between green financial adherence and customer reliability perceptions. Descriptive research is suitable as it enables the systematic collection of data to describe characteristics, opinions, and perceptions of customers toward green financial practices. This design helps in understanding existing conditions without manipulating variables, making it appropriate for perception-based studies in green finance.

SAMPLING TECHNIQUE

The study uses a **convenience sampling technique**, a type of non-probability sampling, where respondents are selected based on their accessibility and willingness to participate. This method is appropriate given time constraints and the ease of data collection, especially when studying customer perceptions in financial institutions. The technique ensures adequate responses from customers familiar with green financial services.

TOOLS FOR DATA COLLECTION

The data was collected through primary and secondary data.

Primary Data

Primary data are collected using a **structured questionnaire**. It has been designed systematically using Google Forms.

Secondary Data

Secondary data are collected from **research journals, books, reports, and official websites** related to green finance and sustainable banking.

SAMPLE SIZE

The study is based on a sample size of **250 respondents**. The selected sample size is considered sufficient to obtain meaningful insights and to conduct basic statistical analysis related to customer perceptions.

PERIOD OF STUDY

The period of study covers **6 months**. During this period, data collection, analysis, and interpretation were carried out. The chosen time frame was adequate to gather reliable responses and complete the research objectives.

AREA OF STUDY

The study adopts a geographically non-restricted approach and includes respondents from various regions who are users of green financial products and services. The data collection was carried out without limiting the study to a particular location.

LIMITATIONS OF THE STUDY

1. The study is based on customer perceptions, which are subjective in nature and may be influenced by individual awareness levels, attitudes, and response bias.
2. The research follows a cross-sectional design, limiting the ability to capture long-term changes in customer reliability perceptions toward green financial practices.

3. The study considers selected dimensions of green financial adherence and does not include comprehensive sustainability or institutional-level environmental performance indicators.

RESEARCH GAP

Although green finance and sustainable banking practices have gained increasing attention in recent years, most existing studies primarily focus on environmental sustainability, regulatory frameworks, and institutional performance of financial institutions. Limited research has examined the customer-centric implications of green financial practices, particularly how such practices influence customers' perceptions of reliability, trust, and confidence toward financial institutions. Furthermore, empirical studies integrating green financial adherence with customer behavioural outcomes remain relatively scarce, especially in the context of developing economies. Therefore, there is a need for empirical research that examines the relationship between green financial adherence and customer reliability perceptions, thereby bridging the gap between sustainable financial practices and customer-oriented outcomes in the financial sector.

REVIEW OF LLITERATURE:

1. **Bahl (2012)** examined the strategic importance of green banking initiatives in modern financial institutions. The study reveals that practices such as paperless banking, green loans, and energy-efficient operations positively influence customers' perceptions. Customers perceive green-adhering banks as socially responsible and dependable. The study concludes that green banking significantly enhances customer confidence and trust.
2. **Lymperopoulos, Chaniotakis, and Soureli (2012)** developed a model of green bank marketing. The study reveals that environmentally responsible banking strategies significantly influence customer trust and loyalty. Customers associate green initiatives with ethical conduct and reliability. The research highlights the importance of green practices in shaping positive customer perceptions.
3. **Jain and Kaur (2016)** examined green banking practices in India. The study finds that eco-friendly banking initiatives positively influence customer trust. Customers associate green banking with transparency and responsibility. The research highlights the importance of green adherence in reliability perceptions.
4. **Sullivan and Mackenzie (2017)** studied responsible investment practices in financial institutions. The findings reveal that customers value ethical and green investment strategies. Green financial adherence positively influences trust and loyalty. The study emphasizes sustainability as a key determinant of customer confidence.
5. **Kaur and Singh (2020)** examined the relationship between green banking and customer satisfaction. The study indicates that green practices positively affect customers' trust and reliability perceptions. Customers feel more secure dealing with environmentally responsible banks. The research confirms that green banking strengthens customer confidence.

DATA ANALYSIS AND INTERPRETATION:

RANK ANALYSIS (HENRY GARRETT'S RANKING TECHNIQUE):

This technique was used to evaluate the problems faced by the researchers. The orders of merit given by the respondents were converted in to rank by using the formula. Garrett's ranking technique was used to rank the preference indicated by the components on different factors. As per this method, respondents have been asked to assign a rank for all factors, and the outcomes of such ranking have been converted into more value.

$$\text{Percent Position} = \frac{100(R_{ij}-0.5)}{N_j}$$

Where,

R_{ij} = Rank given for the i^{th} variable by the j^{th} respondent.

N_j = Number of variables ranked by the j^{th} respondent.

Position estimated is converted into scores, then for each factor, the scores of each individual are added,

and then the total value of scores and the mean value of scores are calculated. The factors having highest

mean value is considered to be the most important factor.

CATEGORY	1	2	3	4	5	6	TOTAL	GARRET MEAN SCORE	RANK
Ethical responsibility	7 539	11 693	26 1404	102 4692	29 1073	25 575	200 8976	44.8	IV
Transparency in policies	13 1001	93 5859	56 3024	16 736	17 629	5 115	200 11,364	56.8	II
Availability of green products	20 1540	48 3024	77 4158	28 1288	14 518	13 299	200 10,827	54.1	III
Environmental commitment	137 10,549	16 1008	20 1080	9 414	3 111	15 345	200 13,234	66.1	I
Compliance with environmental regulations	7 539	23 1449	11 594	24 1104	105 3885	30 690	200 8261	41.3	V
Communication of sustainability initiatives	16 1232	9 567	10 540	21 966	32 1184	112 2576	200 7065	35.3	VI

(Source: Primary Data)

TABLE 1: Rank the following factors in terms of their importance to you

INTERPRETATION

From the above table, Environmental Commitment has gained the top priority in ranking by the respondents, followed by Transparency in policies, Availability of green products, Ethical Responsibility, Compliance with environmental regulations, and Communication of sustainability initiatives.

INFERENCE

Hence, it is inferred that Environmental Commitment has the highest importance and Communication of sustainability initiatives has the lowest importance in terms of their influence in shaping trust in green financial practices.

ONE-WAY ANOVA

ANOVA (Analysis of Variance) is a statistical method used in research to determine if there are significant differences between the means of three or more independent groups. By analyzing variance within and between groups, it tests if observed differences are due to factors being tested rather than random chance.

1. Age

H₀₁: (Null Hypothesis) There is no significant difference in the primary concern regarding green financial products among respondents belonging to different age groups.

H₁₁: (Alternative Hypothesis) There is a significant difference in the primary concern regarding green

financial products among respondents belonging to different age groups.

2. Educational Qualification

H₀₂: (Null Hypothesis) There is no significant difference in the primary concern regarding green financial products among respondents with different educational qualifications.

H₁₂: (Alternative Hypothesis) There is a significant difference in the primary concern regarding green financial products among respondents with different educational qualifications.

3. Monthly Income

H₀₃: (Null Hypothesis) There is no significant difference in the primary concern regarding green financial products among respondents with different monthly income levels.

H₁₃: (Alternative Hypothesis) There is a significant difference in the primary concern regarding green financial products among respondents with different monthly income levels.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	14.712	4	3.678	5.480	.000
	Within Groups	130.868	195	.671		
	Total	145.580	199			
Educational Qualification	Between Groups	5.600	4	1.400	2.317	.059
	Within Groups	117.820	195	.604		
	Total	123.420	199			
Monthly Income	Between Groups	9.361	4	2.340	2.694	.032
	Within Groups	169.394	195	.869		
	Total	178.755	199			

(Source: Primary Data)

TABLE 2: Anova Showing Demographic Factors And Primary Concern Regarding Green Financial Products

INTERPRETATION

The above table presents the results of the ANOVA analysis examining the relationship between demographic factors and primary concern regarding green financial products.

With respect to age, the ANOVA results show that the calculated F value is 5.480 with a significance value of 0.000, which is less than the standard significance

level of 0.05. This indicates that there is a statistically significant difference in the primary concern regarding green financial products among respondents belonging to different age groups.

In the case of educational qualification, the calculated F value is 2.317 with a significance value of 0.059, which is greater than 0.05. This suggests that there is no statistically significant difference in the primary

concern regarding green financial products across respondents with different educational qualifications.

Similarly, for monthly income, the F value is 2.694 with a significance value of 0.032, which is less than the 0.05 significance level. This indicates that there is a significant difference in the primary concern regarding green financial products among respondents with different income levels.

Overall, the analysis reveals that age and monthly income significantly influence respondents' primary concerns regarding green financial products, whereas educational qualification does not show a significant influence.

INFERENCE

From the ANOVA results, it can be inferred that demographic factors such as age and monthly income play a significant role in shaping individuals' concerns regarding green financial products. This implies that people belonging to different age groups and income levels may have varying perceptions and priorities related to sustainable financial products. However, educational qualification does not significantly affect these concerns, indicating that

awareness or perception of green financial products is relatively similar across different educational backgrounds.

CORRELATION

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

The sample correlation coefficient, r , quantifies the strength of the relationship.

Correlations are also tested for statistical significance.

- The closer r is to zero, the weaker the linear relationship.
- Positive r values indicate a positive correlation, where the values of both variables tend to increase together.
- Negative r values indicate a negative correlation, where the values of one variable tend to increase when the values of the other variable decrease.

Correlations			
		Customer Reliability	Green Financial Adherence
Customer Reliability	Pearson Correlation	1	.746**
	Sig. (2-tailed)		.000
	N	200	200
Green Financial Adherence	Pearson Correlation	.746**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			

(Source: Primary Data)

TABLE 3: Correlation Analysis Between Green Financial Practices And Customer Reliability

H₀: (Null Hypothesis) There is no significant relationship between green financial practices and customer reliability.

H₁: (Alternate Hypothesis) There is a significant relationship between green financial practices and customer reliability.

INTERPRETATION

Pearson's correlation analysis was conducted to examine the relationship between Green Financial Practices and Customer Reliability among the respondents. The results indicate that the correlation coefficient between the two variables is $r = 0.746$, which represents a strong positive relationship. This suggests that as the adoption and awareness of green financial practices increase, the level of customer reliability and trust toward financial institutions also tends to increase.

The significance value obtained from the analysis is $p = 0.000$, which is lower than the conventional significance level of 0.01. This indicates that the observed relationship between green financial practices and customer reliability is statistically significant and not due to random variation. Therefore, the findings confirm that green financial initiatives play an important role in strengthening customer reliability and confidence in financial services.

The analysis was conducted using data collected from 200 respondents, which provides sufficient evidence to support the reliability of the statistical relationship observed between the variables.

INFERENCE

From the correlation analysis, it can be inferred that there exists a strong and statistically significant positive relationship between green financial practices and customer reliability. Hence, the null hypothesis stating that there is no significant relationship between green financial practices and customer reliability is rejected, and the alternative hypothesis is accepted. This implies that the promotion and implementation of green financial practices by financial institutions positively influence customer reliability and trust.

FINDINGS:

RANK ANALYSIS

It is inferred that Environmental Commitment has the highest importance and Communication of sustainability initiatives has the lowest importance in terms of their influence in shaping trust in green financial practices.

ONE-WAY ANOVA

From the ANOVA results, it can be inferred that demographic factors such as age and monthly income play a significant role in shaping individuals' concerns regarding green financial products. This implies that people belonging to different age groups and income levels may have varying perceptions and priorities related to sustainable financial products. However, educational qualification does not significantly affect these concerns, indicating that awareness or perception of green financial products is relatively similar across different educational backgrounds.

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SUGGESTIONS:

- The study reveals that a considerable proportion of customers still lack adequate awareness about green financial products. Financial institutions should conduct awareness campaigns through digital platforms, workshops, and customer education programs to promote the benefits of sustainable banking practices.
- Customers expressed higher confidence in banks that possess government certification or verified environmental compliance. Financial institutions

should improve transparency by publishing sustainability reports, undergoing third-party environmental audits, and obtaining recognized green certifications.

- The Garrett ranking analysis revealed that environmental commitment is the most important factor influencing trust. Therefore, banks should actively integrate sustainability into their operational policies and lending decisions to demonstrate genuine environmental responsibility.

CONCLUSION

The present study examined the relationship between green financial adherence and customer reliability perceptions in the financial services sector. In recent years, environmental sustainability has become an important concern for both financial institutions and customers. As a result, banks are increasingly adopting green financial practices such as paperless banking, green loans, sustainable investment initiatives, and transparent environmental policies. These practices aim to support sustainable development while strengthening customer trust and institutional credibility.

The findings of the study indicate that customers show a strong positive perception toward banks that adopt environmentally responsible financial practices. A majority of respondents consider environmental responsibility while selecting financial institutions and are willing to shift to banks that demonstrate stronger green financial commitments. The study also found that factors such as environmental commitment, transparency in policies, and availability of green financial products significantly influence customers' reliability perceptions.

Statistical analysis further confirms that there exists a significant positive relationship between green

financial practices and customer reliability perceptions. This indicates that customers tend to trust financial institutions that actively implement sustainable and environmentally responsible policies. Green financial adherence, therefore, contributes not only to environmental protection but also to strengthening customer confidence and long-term relationships.

Overall, the study concludes that green finance has become an important strategic approach for financial institutions. By integrating sustainability into their operations and financial services, banks can enhance customer trust, improve institutional reputation, and contribute to sustainable economic development.

REFERENCES

1. Bahl, S. (2012). Green banking – The new strategic imperative. *Asian Journal of Research in Business Economics and Management*, 2(2), 176–185.
2. Lymperopoulos, C., Chaniotakis, I. E., & Soureli, M. (2012). A model of green bank marketing. *Journal of Financial Services Marketing*, 17(2), 177–186. <https://doi.org/10.1057/fsm.2012.10>
3. Jain, N., & Kaur, G. (2016). Green banking practices in India. *Journal of Internet Banking and Commerce*, 21(1), 1–17.
4. Sullivan, R., & Mackenzie, C. (2017). *Responsible investment*. London, UK: Routledge.
5. Kaur, J., & Singh, B. (2020). Green banking and customer satisfaction: Evidence from Indian banking sector. *International Journal of Banking and Finance*, 15(2), 65–81.

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