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The Influence of Green Finance Initiatives on the Financial Decision-Making and Sustainable Investment Intentions of Retail Investors

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ABSTRACT: This study investigates how green finance initiatives affect the financial decision-making of retail investors and their sustainable investment intentions. A quantitative, cross-sectional research design was used, and primary data were collected from 220 retail investors through a structured questionnaire using a 5-point Likert scale. The five constructs of the study were Green Finance Awareness, Green Financial Literacy, Perceived Benefits of Green Investment, Financial Decision-Making, and Sustainable Investment Intention. IBM SPSS Statistics was used to analyse the data using descriptive statistics, Cronbach's Alpha, Pearson correlation, and multiple regression analysis. The results showed good levels of reliability for all measurement constructs. Financial Decision-Making was significantly and positively influenced by Green Finance Awareness, Green Financial Literacy, and Perceived Benefits of Green Investment. Additionally, Financial Decision-Making, Perceived Benefits of Green Investment, and Green Financial Literacy significantly influenced Sustainable Investment Intention. The regression model accounted for 38.2% of the variance in Sustainable Investment Intention. The results emphasize the need to enhance investors' awareness of sustainable investment, strengthen their green financial literacy, communicate the perceived financial and environmental benefits of sustainable investment, and support informed financial assessment. The study offers policy, financial, and investment-platform implications for better engaging retail investors in green finance.

1. INTRODUCTION

Capital allocation is no longer the role of finance as climate change, environmental issues, and resource limitations are growing concerns and financial systems now play an active part in facilitating sustainable economic growth (Raman et al., 2025). Green finance has therefore become a crucial tool for channeled finance towards green investment, which relates to renewable energy, diesel-free transport, energy-efficient infrastructure, water management investment, and climate resilient projects, among others (Hariram et al., 2023). Retail investors are an important, yet researched-lean group of investors during this transition as their collective investment behavior can trigger increased demand for green financial products and incentivize financial institutions to improve their sustainable investment offerings (Saif-Alyousfi & Alshammari, 2025). A variety of instruments now offer individual investors a way to connect personal investment decisions to the environment, including: green bonds; investment funds with ESG (environmental, social, and governance) focus; sustainable mutual funds; and more (Fu et al., 2023). Nwani (2022) noted that regulatory mechanisms in India that have been designed at enhancing disclosure, transparency and market credibility, have facilitated the growth of the green finance market. Following this, the Securities and Exchange Board of India

(SEBI) has made changes to the disclosure elements for green debt securities and established a more general regulation on ESG debt securities as more market institutions are implementing sustainable finance in a more institutional way in the Indian securities market (Fu et al., 2024). According to SEBI data, green bonds have become a known fixture on the Indian securities market, though they have not seen the participation of investors in volume like the institutional investors (Kumar, 2025). Along with the spread of green finance, society needs to investigate and analyze the performance and sensitivity of retail investors in order to achieve broader capital allocation that is in harmony with sustainability (Wu et al., 2023).

Retail investors base their financial decision making on a mix of economic, information, psychological and environmental factors. However, when investors make sustainable investment decisions, they cannot only look into risk, return, liquidity and capital appreciation, they must also take into account other factors such as the impact on the environment, social responsibility, sustainability disclosure, and the credibility of green claims (Che Hassan et al., 2023). Thus, the role of awareness and green financial literacy can have a considerable impact on the ability of investors to comprehend and analyse sustainable financial products (Pasquino & Lucarelli, 2025). There is also recent evidence from North India that green financial capability (green financial literacy and green financial inclusion) is a means to enabling green investment by green investment behaviour, underlining the role of investor knowledge and access to this in the transition towards sustainable finance. Likewise, in India, analysis done with retail investors revealed that their investment decision in green bonds can be greatly influenced by their green consciousness and other factors, and that a significant number of retail investors are not yet aware of green bonds. (Zik-Rullahi et al., 2023) The financial aspect is also key as retail investors could be dissuaded from choosing sustainable products when they assume higher financial risk, differentiate between returns and lack of security, may lack in liquidity or proof of environmental effectiveness. Trust is especially paramount as investors can often find it hard to independently verify that a financial product benefits the environment as stated by the issuer (Hanlon et al., 2022). Naveed et al (2020) is the recent research which has indicated that retail investors find sustainable information credible, and there is a strong link between the information about sustainable investments and favorable investment attitudes and sustainable investment intention. Therefore, apart from enhancing investors' awareness of green finance, green financing policy can also improve the quality of information and reduce investors' uncertainty, which in turn promotes investor confidence and promotes the quality of financial decision-making.

Existing evidence indicates that investors' evaluations of green financial products are influenced not only by environmental considerations but also by their perceptions of financial performance, environmental benefits, and the overall usefulness of sustainable investment opportunities. Positive perceptions of the financial and environmental performance of green financial products can strengthen investors' favourable evaluations and willingness to consider sustainable investments. However, these findings also suggest that environmental considerations alone may not be sufficient to explain sustainable investment intentions. Investors are required to evaluate relevant financial information, expected benefits, risks, and the credibility of sustainability-related claims before making investment decisions. Therefore, greater attention is needed to understand how green finance awareness, green financial literacy, perceived benefits, and financial decision-making jointly contribute to sustainable investment intention among retail investors. Further evidence from more recent studies also suggests that the green financial literacy is a powerful predictor of the sustainable investment behaviour, whereas the degree of perceived investment risk ties to reduced sustainable investment behaviour (Urban & Wójcik, 2019). The results revealed that although the environment may be a factor in investing, it is insufficient to explain the intent to invest sustainably by itself; it must also be considered through the acquisition of information, financial and environmental benefit evaluation, risk assessment, trust development and investment decision-making process perspectives. (Yucel et al., 2023) Thus, the thesis of the present study is to analyze the impact of green finance moves on financial decision making and sustainable investment plans of retail investors. As well as financial decision making, perceived financial benefits, perceived environmental benefits, environmental trust, perceived risk, regulatory support, and green financial literacy have been included as significant factors influencing financial decision making (Secrest & Stephan, 2021), and awareness of green finance, along with the construction of trust and perceived risk, is proposed as a potential mechanism influencing sustainable investment intention (Steuer & Tröger, 2022). The study aims to incorporate the financial, environmental, informational and behavioural aspects to offer a holistic understanding of retail investors' intentions to invest sustainably and derive meaningful implications for the regulatory authorities, financial institutions, platforms, or policymakers aiming to expand the participation of retail investors in the nascent green finance landscape of India (Macchiavello & Siri, 2022).

LITERATURE REVIEW

Green finance has become an effective way to foster the shift to greener economic activities through the allocation of funds. The mechanism of green finance has become important for sustainable development considering the money to be allocated to the economic activities that are respectful to the environment. With the rising attention on climate change and environmental sustainability, retail investors are more interested in green investment than ever before. Chan et al. (2022) investigated the issue of green investment decision-making and discovered that perceived control and trust were important aspects that govern the investors' green investment willingness. The results revealed that increase of perceived control led to increased investors' trust in the companies, and that trust served as a strong factor influencing investors' investments in green activities. The study also highlighted the importance of awareness building activities in businesses and reliance on businesses in the intention of building sustainable capital formation by creating a collaboration between the businesses and policy makers.

In recent years, the importance of financial knowledge and information in retail investors' sustainable investment intentions in particular has been emphasized. Based on the survey data of Chinese Retail Investors (CRI), Tao (2026) concluded that perceived usefulness, investment literacy and transparency of information had a positive effect on willingness to invest in Chinese green bonds. The study results also confirmed that these factors helped to foster an environment of openness to change, which then led to an increase in investment willingness. This indicates that retail investors are more inclined to being interested in investing green financial instruments if they recognize its utility, access to reliable, transparent and relevant information is provided. In the same vein, sustainable finance literacy, and positive perceptions about the environmental impact of sustainable financial instruments led to better sustainable investment attitudes as reported by Yucel et al. (2023). The knowledge about risk diversification using sustainable financial products was strongly influential, particularly emphasising the need for investor education and financial awareness in developing countries.

Psychological, social, market, and demographic factors are also impacting investors' behavior. By means of systematic review, Che Hassan et al. (2023) have been able to conclude that the personal, social, market information, firm-specific characteristics, product-related factors, and demographic characteristics are major factors which effect on investment intention and investment decision making. Their research findings support the idea of investment behavior being multidimensional and not able to be represented solely by the expected financial returns. This behavioural approach is especially relevant to the field of green finance as investors could be interested in taking into account environmental and social outcomes alongside the usual financial ones. In addition, Hasebrook et al. (2022) found that there was an intention-behavior gap among those in the financial sector, highlighting that a positive intention to engage in "green" behaviour does not necessarily reflect actual sustainable behaviour. Financial motivations were not always the most effective and the combination of social motivations and financial motivations led to increased green behaviour.

In addition to this, ESG factors and institutional policies have an important role to play in addressing sustainable investment decisions. In China environmental factors emerged as the most important ESG consideration in green finance investment decisions, followed by governance and social aspects, as revealed by Li et al. (2023). They also highlighted the significance of green finance innovation, social responsibility, community engagement, and environmental regulation as policy priorities. The issues highlighted included green finance innovation, social responsibility, community engagement, and environmental regulation. This result aligns with that of Pašiušienė et al. (2023), who also indicated a high intention to invest in green investments among people born post-1996; however, they noted that those born after 1996 were not following through with green investing.

An additional explanation for the behavior of sustainable investments is provided by the Theory of Planned Behavior. Zhang and Huang (2024) determined that perceived behavioral control had a special role in creating social responsible investment intentions and behavior. They further included financial literacy and risk propensity as additional variables in their modelling and showed that investors' knowledge, perceived control and attitudes towards risk enabled their investment decisions. In general, the literature supports the fact that green finance measures, financial literacy, information transparency, trust, perceived control, environmental perceptions, ESG and risk attitudes all contribute to the intention for sustainable investments. An examination of these factors in parallel, however, as they relate to retail investor financial decision making has received little attention. Based on this, the present study aims to fill this gap by looking at the impact of green finance measures on retail investors' financial decision making and sustainable investment intentions.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study follows the quantitative and descriptive-explanatory approaches to analyze the impact of green finance initiatives on the financial decision-making and sustainable investment of retail investors. The quantitative approach allows the researcher to measure the investors' perceptions systematically and statistically analyse the relationships among the selected variables. The study is cross-sectional survey design as the primary data were collected from the retail investors at a specific time. This study focuses on five main relationships: green finance awareness–green financial literacy, perceived benefits of green investments–green financial decisions, and financial decisions–sustainable investments intention. No mediation or moderation analysis is used to analyze the data. Empirical analysis is done using IBM SPSS Statistics Software.

3.2 Population of the Study

The target audience is retail investors with experience in making financial investment decisions. The respondents can cover those investors who invest in equity shares, mutual funds, bonds, other fixed-income securities, exchange-traded funds and all other securities. This study focuses in particular on those investors who have awareness of, or exposure to, green investment products, ESG and sustainable investment products. The study targets retail investors as the actual actions of these individual investors affect the demand for sustainable financial products. Insights gained by understanding how they think and how they make decisions can thus help financial institutions, regulators and fiscal policy makers from IFIs to increase the involvement of green finance.

3.3 Sampling Technique and Sample Size

It is a purposive-convenience/non-probability type of sampling. Employing purposive sampling, the sampling plan ensured that the respondents fulfilled the basic criterion for participation in the study— retail investors who have invested any money on investment experience. Convenience sampling is employed to make collection of responses easier through online and offline questionnaires. The study is to be based on a sample of about 400 retail investors. The key is the respondents must have a variety of demographic characteristics and investment experiences, such as age, gender, education, occupation, income, and investment experience. For testing the clarity and reliability of the questionnaire, a smaller sample of around 30–50 of the respondents may be given the questionnaire as a pilot study.

3.4 Data Collection

The primary data will be gathered from profitable retail investors by using structured questionnaire through online survey and direct survey (mail). The questionnaire will basically consist of three parts: Demographic and investment related information (Section A), green finance perceptions and financial decision-making (Section B), and sustainable investment intention (Section C). All construct items will be rated on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree.

3.5 Variables of the Study

To maintain a focused five-hypothesis model, the study incorporates five principal constructs.

Variable	Role
Green Finance Awareness (GFA)	Independent Variable
Green Financial Literacy (GFL)	Independent Variable
Perceived Benefits of Green Investment (PBGI)	Independent Variable
Financial Decision-Making (FDM)	Independent Variable
Sustainable Investment Intention (SII)	Dependent Variable

The conceptual relationships aim to consider both direct relationships between green finance-related elements and investors' decision making and the relationship between green financial elements and investors' decision making and sustainable investment intention.

3.6 Research Hypotheses

The study proposes the following five hypotheses:

H1: Green Finance Awareness has a significant positive influence on the Financial Decision-Making of retail investors.

H2: Green Financial Literacy has a significant positive influence on the Financial Decision-Making of retail investors.

H3: Perceived Benefits of Green Investment have a significant positive influence on the Financial Decision-Making of retail investors.

H4: Financial Decision-Making has a significant positive influence on the Sustainable Investment Intention of retail investors.

H5: Green Finance Awareness, Green Financial Literacy, Perceived Benefits of Green Investment, and Financial Decision-Making collectively have a significant influence on Sustainable Investment Intention.

3.7 Questionnaire Development

The items in the questionnaire will be grounded on the existing literature on the green finance, sustainable investment, financial literacy, investor behaviour, and financial decision-making. Items will be adjusted to the retail investor context and edited as needed to be clear and relevant in that context.

The respondents' level of awareness of green bonds, ESG funds, sustainable financial products, funds involving environment finance and green finance initiatives will be assessed by Green Finance Awareness.

The measurement of Green Financial Literacy will focus on respondents' knowledge of both the financial and environmental characteristics of the green investment, such as risk, return, sustainability information and environmental performance.

Perceived Benefits of Green Investment will measure how many respondents believe that “green investments” have benefits for the environment, a long-term financial benefit, diversification of their portfolio and contribute to the benefits of Sustainable Development.

Financial Decision-Making will assess how much investors consider investment options, the importance they place on investment risk and return, how often they use available information about investments, and if these investors include sustainability factors in their investment decisions.

Sustainable Investment Intention will gauge people's preparedness and likelihood to invest in the future in Sustainable Financial Products, such as green bonds, ESG funds, Sustainable Mutual Funds, and other forms of sustainable investment.

3.8 Data Analysis

The data collected will be coded and analysed using the IBM SPSS Statistics. The data will be examined for missing values, invalid responses, duplication, outliers and data entering errors and then the composite scores for each construct will be calculated. The level of descriptive analysis will be frequencies, percentages, mean and standard deviation. The reliability of the constructs will be measured with cronbach alpha, which is considered as good if has value of 0.70 or more. Skewness and kurtosis will be examined to assess data normality. Relationships among the variables will be measured by Pearson correlation determining both direction and strength. To achieve this, two multiple regression models will be used: the first model will focus on GFA, GFL, and PBGI's effects on Financial Decision-Making (FDM), and the second model will examine the effects of GFA, GFL, PBGI, and FDM on Sustainable Investment Intention (SII). The regression analysis will present the value of R, R², Adjusted R², F-Statistic, β Coefficient, t-Value and p-value, and the value of p at < 0.05 will be considered as statistically significant. Before interpreting the regression results this test will be conducted to check the multicollinearity by calculating the VIF and tolerance.

3.9 Model Summary and Explanatory Power

Both R² and AdjustedR² will be used to measure the explanatory power of the regression models. R² describes the amount of variance in the y variable which is captured by the x variables used in the model. The ANOVA F-test will be evaluated to find if the overall regression model is statistically significant. If the F test is statistically significant ($p < 0.05$), it will imply that all of the predictors together explain the dependent variable statistically.

3.10 Multicollinearity and Regression Assumptions

Use of the regression coefficients can only take place after a scrutiny of the assumptions made in multiple regression. Multicollinearity occurs when there is a significant correlation between independent variables. To measure multicollinearity among the independent variables, the use of Variance Inflation Factor (VIF) and Tolerance will be applied. The Durbin–Watson statistic will be checked for independence of residuals. Linearity and Homoscedasticity will be checked using Scatterplots and Residual Plots. Standardized residuals and Cook's distance can also be analysed for the presence of influential observations.

3.11 Independent-Samples t-Test and One-Way ANOVA

Further analysis can be performed to identify if there are differences in Sustainable Investment Intention by demographic group.

If two groups are occurring, such as male and female respondents, you can use an independent-samples t-test.

It is used when there are 3+ groups, for example:

- Different age groups
- Income categories
- Education levels
- Investment experience groups

If a statistically significant ANOVA result is found an appropriate post hoc can be performed to determine which groups are responsible for the difference.

3.12 Hypothesis Decision Criteria

Pearson correlation and Multiple Regression analysis will be used to test the hypotheses. The principle criterion used for statistical significance will be at the 5% level ($p < 0.05$).

Hypothesis	Relationship	Statistical Test
H1	GFA $\rightarrow$ FDM	Multiple Regression
H2	GFL $\rightarrow$ FDM	Multiple Regression
H3	PBGI $\rightarrow$ FDM	Multiple Regression
H4	FDM $\rightarrow$ SII	Multiple Regression
H5	GFA + GFL + PBGI + FDM $\rightarrow$ SII	Multiple Regression

For each hypothesis, a regression coefficient will be statistically significant at $p < 0.05$ and in the predicted direction to be considered supported. Otherwise, the hypothesis will be considered not supported.

4. RESULTS AND DISCUSSION

4.1 Respondents' Demographic Profile

Data from 220 retail investors were analysed in the study. Of the respondents, 128 (58.2%) were male and 92 (41.8%) were female. Sixty-two respondents (28.2%) were aged 35–44, followed by 59 respondents at 25–34 years age. As far as education was concerned, 81 (36.8%) were postgraduates and 76 (34.5%) were graduates. The top group were salaried employees (70, 31.8%) followed by the business/self-employed respondents (43, 19.5%). As it comes to investment experience, 53 of the respondents (24.1%) had investment experience of 1-3 years, 51 (23.2%) respondents had 4-6 years and 50 (22.7%) respondents have 7-10 years of experience. Mutual funds proved to be the most popular investment vehicle with 71 respondents (32.3%) choosing it, before equity shares with 63 respondents (28.6%). Importantly, 167 respondents (75.9%) indicated that they heard about green financial products while 56 respondents (25.5%) had already invested in a green, ESG or sustainable financial product.

Table 1. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	128	58.2
	Female	92	41.8
Age	Below 25	37	16.8
	25–34	59	26.8
	35–44	62	28.2
	45–54	39	17.7
	55 and above	23	10.5
Education	Higher Secondary	14	6.4
	Graduate	76	34.5
	Postgraduate	81	36.8
	Professional	33	15.0
	Doctoral/Other	16	7.3
Investment Experience	<1 year	33	15.0
	1–3 years	53	24.1
	4–6 years	51	23.2
	7–10 years	50	22.7
	>10 years	33	15.0

4.2 Descriptive Statistics

The descriptive analysis revealed that the average scores for all five constructs were near the middle of the 5-point scale. Green Finance Awareness had a mean of 2.996 (SD = 0.727), while Green Financial Literacy had a mean of 2.995 (SD = 0.725). Perceived Benefits of Green Investment recorded the highest mean of 3.007 (SD = 0.715), followed by Financial Decision-Making with a mean of 3.012 (SD = 0.658). Sustainable Investment Intention had a mean of 2.990 (SD = 0.707). Overall, the findings indicate that respondents demonstrated moderate levels of green finance awareness, green financial literacy, perceived benefits of green investment, financial decision-making, and sustainable investment intention.

Table 2. Descriptive Statistics

Construct	N	Mean	Std. Deviation	Skewness	Kurtosis
Green Finance Awareness	220	2.996	0.727	0.074	0.075
Green Financial Literacy	220	2.995	0.725	0.177	-0.046
Perceived Benefits of Green Investment	220	3.007	0.715	-0.057	0.010
Financial Decision-Making	220	3.012	0.658	-0.011	-0.453
Sustainable Investment Intention	220	2.990	0.707	0.148	-0.134

All the skewness and kurtosis values are relatively small suggesting that the distributions are reasonably symmetric and appropriate for further parametric analyses.

4.3 Reliability Analysis

The internal consistency of measurement scales were examined using Cronbach's Alpha. The reliability coefficients of all constructs were above the generally accepted criterion of 0.70. Green Finance Awareness obtained an α of 0.874 and Green Financial Literacy obtained, 0.906. The alpha values of Perceived Benefits of Green Investment, Financial Decision-Making, and Sustainable Investment Intention were obtained as 0.904, 0.908, and 0.883, respectively.

Table 3. Reliability Analysis

Construct	No. of Items	Cronbach's Alpha	Result
Green Finance Awareness	5	0.874	Reliable
Green Financial Literacy	5	0.906	Reliable
Perceived Benefits of Green Investment	5	0.904	Reliable
Financial Decision-Making	6	0.908	Reliable
Sustainable Investment Intention	5	0.883	Reliable

All constructs showed Cronbach alpha values of 0.8 and above and good internal consistency. So, measurement scales are judged as being reliable enough to be used for correlation and regression analysis.

4.4 Pearson Correlation Analysis

The relationships between the study variables were analyzed using Pearson correlation. The Financial Decision-Making and Sustainable Investment Intention were positively correlated with Green Finance Awareness ($r = 0.459$, $p < 0.001$ and $r = 0.284$, $p < 0.001$, respectively). The Financial Literacy activities "Financial Decision-Making" and "Sustainable Investment Intention" had the strongest positive association with Green Financial Literacy ($r = 0.511$, $p < 0.001$; $r = 0.516$, $p < 0.001$ respectively). Additionally, Perceived Benefits of Green Investment was also significantly and positively related with Financial Decision-Making $r = 0.531$, $p < 0.001$, and Sustainable Investment Intention, $r = 0.458$, $p < 0.001$, respectively. The strongest correlation was found between Sustainable Investment Intention and Financial Decision-Making ($r = 0.528$, $p < 0.001$). The findings suggest that green financial knowledge and analysis of the benefits of green financing has a significant influence on how investors make financial selections and their intent to invest in green finance.

Table 4. Pearson Correlation Matrix

Variables	GFA	GFL	PBGI	FDM	SII
GFA	1				
GFL	.457***	1			
PBGI	.465***	.486***	1		
FDM	.459***	.511***	.531***	1	
SII	.284***	.516***	.458***	.528***	1

Note: *** $p < 0.001$.

4.5 Multiple Regression Analysis

4.5.1 Influence of Green Finance Variables on Financial Decision-Making

To analyze the relation of Green Finance Awareness, Green Financial Literacy, and Perceived Benefits of Green Investment on Financial Decision-Making, multiple regression analysis was carried out.

The regression model is statistically significant ($F = 46.33$; $P < 0.001$) and 39.2% of the variance in Financial Decision-Making ($R^2 = 0.392$; Adjusted $R^2 = 0.383$) was accounted for by the model.

To test the hypothesis H1, a significant positive impact came out for Green Finance Awareness on Financial Decision-Making ($\beta = 0.190$, $t = 3.018$, $p = 0.003$), supporting the hypothesis. Green Financial Literacy also had a positive significant correlation ($\beta = 0.273$, $t = 4.295$, $p < 0.001$), and thus confirmed H2. The perceived Benefits of Green Investment was the most significant of the three predictors as it was higher ($\beta = 0.311$, $t = 4.860$, $p < 0.001$) and supported H3.

Table 5. Regression Results: Financial Decision-Making

Predictor	B	Std. Error	Beta (β)	t	p-value	VIF
Constant	0.672	0.205	—	3.284	0.001	—
Green Finance Awareness	0.199	0.066	0.190	3.018	0.003	1.401
Green Financial Literacy	0.267	0.062	0.273	4.295	<0.001	1.436
Perceived Benefits of Green Investment	0.315	0.065	0.311	4.860	<0.001	1.451

$R = 0.626$; $R^2 = 0.392$; Adjusted $R^2 = 0.383$; $F = 46.33$; $p < 0.001$

The results indicate that all of the three green finance variables are significantly related to Financial Decision-Making. Perceived Benefits of Green Investment is the top factor to predict pro-environmental behavior, followed by Green Financial Literacy and Green Finance Awareness. VIF values are lower than those generally concerning, meaning it is unlikely there is multicollinearity as a concern.

4.5.2 Influence on Sustainable Investment Intention

Another multiple regression analysis was carried out to answer the question of whether Green Finance Awareness, Green Financial Literacy, Perceived Benefits of Green Investment and Financial Decision-Making impact Sustainable Investment Intention.

The overall regression model turned out to be statistically significant ($F = 33.29$, $p < 0.001$) with an R^2 value of 0.382 and an Adjusted R^2 value of 0.371.

The relationship between Financial Decision-Making and Sustainable Investment Intention was favorable, with a significant influence of Financial Decision-Making with a β of 0.313, t result 4.558 and $p < 0.001$ to support the following H4: Financial Decision-Making positively influences Sustainable Investment Intention. Green Financial Literacy had significant positive influence ($\beta = 0.305$, $t = 4.561$, $p < 0.001$) and Perceived Benefits of Green Investment had significant positive influence ($\beta = 0.183$, $t = 2.688$, $p = 0.008$).

On the other hand, the direct effects of Green Finance Awareness on Sustainable Investment Intention was not statistically significant after the other variables were entered into the model ($\beta = -0.084$, $t = -1.294$, $p = 0.197$).

Table 6. Regression Results: Sustainable Investment Intention

Predictor	B	Std. Error	Beta (β)	t	p-value	VIF
Constant	0.922	0.206	—	4.484	<0.001	—
Green Finance Awareness	-0.085	0.066	-0.084	-1.294	0.197	1.460
Green Financial Literacy	0.290	0.064	0.305	4.561	<0.001	1.559
Perceived Benefits of Green Investment	0.180	0.067	0.183	2.688	0.008	1.609
Financial Decision-Making	0.304	0.067	0.313	4.558	<0.001	1.643

$R = 0.618$; $R^2 = 0.382$; Adjusted $R^2 = 0.371$; $F = 33.29$; $p < 0.001$

The results have shown that Financial Decision-Making is an influential factor in Sustainable Investment Intention. In addition, the green financial literacy also shows a relatively high contribution, indicating that investors who have understood more about green financial products have a high probability of having sustainable investment intentions.

4.6 Hypothesis Testing

Table 7. Summary of Hypothesis Testing

Hypothesis	Relationship	β	t	p	Decision
H1	GFA $\rightarrow$ FDM	0.190	3.018	0.003	Supported
H2	GFL $\rightarrow$ FDM	0.273	4.295	<0.001	Supported
H3	PBGI $\rightarrow$ FDM	0.311	4.860	<0.001	Supported
H4	FDM $\rightarrow$ SII	0.313	4.558	<0.001	Supported
H5	GFA + GFL + PBGI + FDM $\rightarrow$ SII	—	F = 33.29	<0.001	Supported

All 5 hypotheses are confirmed by the results. Financial Decision-Making gains are found to be impacted substantially by Green Finance Awareness, Green Financial Literacy, Perceived Benefits of Green Investment, as a result they are included in their respective supports. The Financial Decision-Making very clearly contributes to Sustainable Investment Intention, which is why it was selected as an H4. Therefore, there is a need to support H5, which is indicated by the overall regression model that significantly explains the variation in Sustainable Investment Intention.

4.7 Discussion

The results showed that the level of knowledge about green finance and the perceived benefits of green finance are crucial factors influencing the financial decisions of retail investors. Green Finance Awareness is a critical positive influence for FD, suggesting that investors with higher levels of awareness of green finance concepts have a higher tendency to look at sustainability-related information in the context of evaluating investment options. This result corresponds with other sustainable finance literature, which underscores the relevance of the availability of information and sustainable finance awareness in retailing the sustainable financial markets.

Green Financial Literacy was found to be a key determinant in Financial Decision-Making and Sustainable Investment Intention. The effect of its Financial Decision-Making was significant ($\beta = 0.273$) and the effect on Sustainable Investment Intention was still significant even when other variables are analyzed ($\beta = 0.305$). It implies that awareness of green finance is not enough; investors must be capable of understanding environmental information, product characteristics as well as risk and returns. The finding is consistent with previous studies which emphasize the importance and contribution of green financial capability to the green investment behavior. For retail investors, there is a significant advantage to financial literacy in eradicating uncertainty and helping their ability to distinguish between the different sustainable investment options.

The highest level of perceived benefit in Green Investment ($\beta = 0.311$) had the greatest impact on Financial Decision-Making. This suggests that investors are more inclined to integrate green investments in their investment process if they felt the benefits were environmental and financial. That's significant because retail investors will not make investment decisions based on environmental concerns. They also need to have faith that sustainable investments offer them a fair financial return, diversity and long-term benefits. The high impact of PBGI on Sustainable Investment Intention ($\beta = 0.183$, $p = 0.008$) further confirmed the direct impact of PBGI on the willingness of investors to choose sustainable financial products.

In the last multiple regression model, the highest β value was for Financial Decision-Making ($\beta = 0.313$, $p < 0.001$) and sustainable investment intention (SII). The second finding is that sustainable investment intention is closely related to investors' evaluation – and comparison – of investment alternatives. Systematic analysis of financial information, risk and return, sustainability and the verifiability of sustainability statements is positively associated with investors' willingness to invest in sustainable products. This outcome further emphasizes the need for taking sustainability into account in the mainstream of financial decision-making, instead of sustainable investment being an entirely new investment category.

An important finding is that Green Finance Awareness had a significant positive influence on Financial Decision-Making ($\beta = 0.190$, $t = 3.018$, $p = 0.003$) in the first regression model. However, its direct effect on Sustainable Investment Intention was negative and statistically insignificant after Green Financial Literacy, Perceived Benefits of Green Investment, and Financial Decision-Making were included in the second regression model ($\beta = -0.084$, $t = -1.294$, $p = 0.197$). These findings indicate

that although awareness of green finance contributes significantly to investors' financial decision-making, awareness alone may not be sufficient to translate into sustainable investment intention. Investors may be aware of green financial products but may still require adequate financial literacy, perceived benefits, and informed financial assessment before developing an intention to invest in sustainable financial products. Thus, better knowledge, perceived value, and careful financial decision-making appear to be more important in moving investors from awareness to sustainable investment intention.

The overall explanatory power of the final regression model also was meaningful, indicated by $R^2 = 0.382$, which means that the four predictors accounted for 38.2% of the variance in Sustainable Investment Intention. The statistically significant F-test well illustrates that the model contributes significantly to the explanation of the retail investors sustainable investment intention of the sample ($F = 33.29$, $p < 0.001$).

From the practical point of view, the results highlight the need for financial institutions not just to push for the development of green investment products. Understandable information and financial education, transparent sustainability disclosures and evidence of environmental and financial benefits are required for retail investors. The regulators and financial institutions could thus enhance green financial product education programmes and increase the accessibility and comparability of green financial products. It's not as if people aren't aware of green financial products because 75.9% said they had heard about them, but when it comes to investing in them, 25.5% said they have previously used such products. Awareness is a key component, but it must be based on some degree of financial literacy, believable information, attractive investment traits, and confidence that investors will have.

Overall, the findings suggest that the progress of green finance among retail investors is challenging and requires the combined effects of knowledge, perceived benefits and rational financial appraisal. The results validate the opinion that this sustainable investment behaviour is not only due to environmental consciousness. On the contrary, when retail investors have high levels of green financial knowledge, feel that they can make a positive difference to the environment and that sustainable investment is a part of their financial decision making, then they are more likely to consider sustainable investment.

CONCLUSION

The main purpose of this study is to investigate how green finance programs affect the financial decision-making process and the intention of sustainable investment in retail investors. On the basis of the comparative study of 220 respondents, the results of this study showed that there were significant relationships between each of the independent variables and the dependent variable. The results of the comparative study confirmed that Green Finance Awareness, Green Financial Literacy and the perceived benefits of Green Investment positively influenced Financial Decision-Making, on the basis of 220 respondents. Perceived benefits had greatest influence on financial decision making among these. The results also indicated that all of the variables – Financial Decision-Making, Green Financial Literacy, and Perceived Benefits – significantly explained Sustainable Investment Intention in total, accounting for 38.2% of the variance. Financial decision making was positively related to awareness of green finance but the direct impact to sustainable investment intention was not significant. The results of the study indicate that merely raising awareness is not enough to create a desire for sustainable investment. Instead, investors must have sufficient information, clear information, and perceived advantages of their finances and the environment, as well as informed decision making. Thus, it is so important that financial institutions and policy-makers promote retail participation in sustainable investment through the reinforcement of the financial dimension of sustainable investment and its financial literacy such as financial transparency and consumers' education.

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