

Financial Literacy and Green Investment Decisions among Gen Z in Yogyakarta

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Keywords : Financial Literacy, Green Investment, Generation Z, Yogyakarta

Abstract: This study investigates the relationship between financial literacy and green investment decisions among Generation Z in Yogyakarta. As environmental sustainability awareness grows, younger generations are increasingly inclined to make investment decisions that align with green and ethical values. Using a quantitative approach, data were collected from 120 respondents through structured questionnaires. The data were analyzed using regression analysis to examine the effect of financial literacy on green investment decisions. The findings indicate that financial literacy has a significant and positive influence on Gen Z's willingness to invest in environmentally sustainable companies. Respondents with higher financial literacy tend to make more informed and responsible green investment choices. These results highlight the importance of strengthening financial education to foster sustainable financial behavior among young investors. The study offers practical implications for policymakers, educators, and financial institutions in promoting financial literacy and green investment awareness.

Introduction

In recent years, the global landscape has witnessed a paradigm shift toward sustainability, driven by heightened awareness of the adverse consequences of unchecked economic activities on the environment (Hariram et al., 2023). This shift is largely motivated by the increasingly tangible effects of climate change such as extreme weather events, rising sea levels, biodiversity loss, and the depletion of critical natural resources. These environmental crises have catalyzed urgent calls for systemic transformation, not only in public policy and industry practices but also in how individuals and institutions manage their financial

capital (Angorani, 2024). As a result, sustainability has become a central theme in global policy frameworks, business strategies, and investment behavior (Voulvoulis et al., 2022).

One significant manifestation of this growing sustainability consciousness is the rise of green investment, a financial approach that integrates environmental, social, and governance (ESG) considerations into investment decisions (Xiao et al., 2023). Green investment involves channeling funds into projects, businesses, or financial instruments that aim to produce positive environmental outcomes. These include renewable energy initiatives (such as solar, wind, and hydroelectric power), sustainable transportation (like electric vehicles and mass transit systems), energy-efficient infrastructure (including green buildings), clean water technologies, sustainable agriculture, and circular economy practices like recycling and waste reduction (Chițimiea et al., 2021).

Unlike traditional investment strategies that prioritize financial returns alone, green investment embodies a dual purpose: it seeks not only to yield profitable financial outcomes but also to support long-term ecological sustainability and social responsibility (Nartey, 2025). This aligns closely with the principles of responsible investing and the broader transition toward a low-carbon, resource-efficient global economy (Emma, 2024). Investors, particularly those from younger generations like Generation Z, are increasingly motivated by value-based investing, demonstrating interest in how their capital can contribute to environmental stewardship and climate resilience (Ning & Shen, 2024).

Moreover, green investments are seen as instrumental in achieving global commitments such as the Paris Agreement and the United Nations Sustainable Development Goals (SDGs) (Chygryn et al., 2022). In particular, green investment directly supports goals related to climate action (Goal 13), affordable and clean energy (Goal 7), responsible consumption and production (Goal 12), and sustainable cities and communities (Goal 11). By aligning capital flows with sustainable development objectives, green investment is positioned not only as a moral or ethical imperative but also as a strategic and forward-looking financial decision (Dmuchowski et al., 2023).

The growth of green investment is also catalyzed by the increasing integration of ESG metrics into risk assessment frameworks from a macroeconomic perspective. Environmental risks such as regulatory penalties for high emissions, costs associated with natural disasters, or reputational damage are now recognized as financially material concerns (Laokulrach, 2025). Consequently, institutional investors, governments, and corporate entities are redirecting capital toward greener assets as a means of hedging against long-term systemic risks and fostering resilience in their portfolios. Green investment is more than a trend; it is a transformative financial approach that reflects the evolving relationship between economic activity and environmental responsibility (Chen et al., 2023). It plays a pivotal role in accelerating the global transition toward sustainability, while also redefining how value is created and measured in the financial sector. Understanding this concept is crucial, particularly for young investors who will shape the future of sustainable finance through their preferences, behaviors, and investment decisions (Fu et al., 2023). The extent to which young

people grasp the principles of green investment, and their willingness to participate in it, will significantly influence the pace of global progress toward a greener economy.

The increasing urgency to address environmental concerns has reshaped investor behavior globally, fostering a shift away from purely profit-oriented investing toward approaches that emphasize ethical and environmental impact. This shift is particularly pronounced among the younger generation (Thapa & Kafle, 2025). Generation Z, individuals born between 1997 and 2012, represents a highly influential demographic. As digital natives raised during an era characterized by climate change discourse, environmental activism, and increased access to information through technology, Gen Z is not only more aware of global sustainability issues but also more inclined to take action through their financial decisions. They demonstrate a strong preference for investing in companies that uphold Environmental, Social, and Governance (ESG) standards, seeing investment not merely as a vehicle for personal gain, but as a way to contribute to meaningful social and ecological outcomes (Malzara et al., 2023).

Moreover, members of Gen Z are uniquely positioned to lead the evolution of responsible investing due to their early exposure to digital finance platforms, such as investment apps, robo-advisors, and fintech services that provide easy access to ESG-focused investment portfolios (Kasbe, 2025). This technological fluency reduces barriers to entry for young investors and enables them to make more autonomous, informed financial choices. At the same time, their value-driven mindset leads them to scrutinize where their money goes and what kind of impact it creates. Green investing, therefore, aligns naturally with Gen Z's desire to effect change on a larger scale while securing their financial future (Pašiušienė et al., 2023).

However, despite their enthusiasm, one critical factor that determines whether Gen Z actively participates in green investment is their level of financial literacy (Nag & Shah, 2022). While this generation may have the tools and motivation, a lack of foundational knowledge about financial concepts such as risk diversification, long-term planning, or sustainable asset evaluation can hinder their ability to make sound investment decisions. Financial literacy, in this sense, becomes not only a practical skill but also an empowering force that enables young people to channel their values into impactful financial actions (Luo & Cheng, 2023). Strengthening financial literacy, especially about sustainability-focused investing, is essential to bridge the gap between intention and behavior among Gen Z investors.

Financial literacy is broadly defined as the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing. For green investments in particular, which often involve long-term commitments, higher upfront costs, and emerging risk factors financial literacy is vital. An individual who is financially literate is more likely to assess investment opportunities rationally, consider long-term environmental impacts, and understand complex financial instruments such as green bonds, sustainabilitylinked funds, or ESG ratings (Lusardi & Mitchell, 2023).

Several studies have highlighted the significant role that financial literacy plays in shaping positive financial behavior, including increased saving rates, better debt management, and smarter investment decisions (Atkinson & Messy, 2012; Bongomin et al., 2016). However,

there is still a lack of empirical research specifically examining the link between financial literacy and green investment behavior, especially among Generation Z in developing country. Most existing literature focuses on traditional financial decision-making, leaving a research gap in understanding how knowledge of finance influences sustainability-driven investment preferences in youth populations.

In regions such as Yogyakarta, where educational institutions and youth-driven communities thrive, this intersection between financial literacy and green investment becomes particularly important. Yogyakarta is home to a large population of Gen Z individuals such as students, young professionals, and entrepreneurs who are increasingly engaged in conversations about environmental sustainability, digital innovation, and inclusive finance. The city also has several green initiatives, including green transport policies and waste-reduction programs, that contribute to growing environmental awareness among its residents (Shalihati et al., 2022). However, despite this progressive atmosphere, the actual financial engagement of Gen Z in green investments in the region remains unclear. Exploring how financial literacy influences their green investment decisions can provide valuable insights into how emerging economies can nurture a generation of financially literate, sustainability-oriented investors.

Research Method

This study employs a quantitative research approach to examine the influence of financial literacy on investment decisions in sustainability-oriented companies among Generation Z in Yogyakarta. The research adopts a causal design to identify and analyze the causal relationship between financial literacy and investment decision-making of green investment. Yogyakarta is selected as the research site due to its demographic diversity and its reputation as a hub for educated youth and innovation, which makes it a strategic location to study Generation Z's behavior toward sustainable finance.

The population of this study comprises Generation Z individuals, aged 18–27, who are either university students or young professionals residing in Yogyakarta. The sampling technique used is purposive sampling, with specific criteria that participants must have basic knowledge or interest in investment and be aware of sustainability-oriented business practices. Data is collected through an online structured questionnaire utilizing a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument consists of two main constructs: (1) Financial Literacy, adapted from Bongomin et al. (2016), and (2) Investment Decision in Sustainability-Oriented Companies, adapted from Malzara et al. (2023). The financial literacy construct is measured through 4 indicators, including knowledge of sustainable finance, understanding of risk-return concepts, budgeting behavior, and long-term financial planning. The investment decision construct is measured through 3 indicators, including intention to invest in sustainable businesses, evaluation of green business information, and willingness to prioritize sustainability in financial decisions.

The data analysis technique employed in this study is multiple linear regression using SPSS version 26. Prior to hypothesis testing, classical assumption tests such as normality, multicollinearity, and heteroscedasticity tests are conducted to ensure the validity of the

regression model. The research hypotheses are tested by analyzing the regression coefficients and their statistical significance ($p\text{-value} < 0.05$), enabling the study to determine whether financial literacy significantly influences the investment decisions in sustainability-oriented companies.

Results and Discussion

Respondent Characteristics

Table 1. Characteristics of Research Respondent

Items	Category	Frequency (n)	Percentage (%)
Gender	Male	55	45.8%
	Female	65	54.2%
Age Group	18–21 years	25	20.8%
	22–25 years	58	48.3%
	26–28 years	37	30.9%
Education Level	Senior High School	10	8.3%
	Diploma	15	12.5%
	Bachelor's Degree	80	66.7%
	Master's Degree or higher	15	12.5%
Monthly Income	< IDR 2 million	20	16.7%
	IDR 2–5 million	50	41.7%
	> IDR 5 million	50	41.7%
Investment Duration	< 1 year	28	23.3%
	1–3 years	57	47.5%
	> 3 years	35	29.2%

Source: Data Processing

The study involved 120 respondents who belong to Generation Z, defined as individuals born between 1997 and 2012. These individuals, currently aged between 18 and 28 years old, were selected based on their experience of investing in companies implementing Environmental, Social, and Governance (ESG) principles. In terms of gender, the sample is relatively balanced, with 54.2% identifying as female and 45.8% as male. This distribution indicates that interest in ESG investments spans both genders among Gen Z. Looking at the age composition, the largest proportion of respondents (48.3%) falls within the 22–25 years age group, followed by those aged 26–28 years (30.9%) and 18–21 years (20.8%). This reflects a high level of investment engagement among young adults in their early to mid-20s.

Regarding educational background, a significant number of respondents (66.7%) have attained a bachelor's degree, while 12.5% hold a Diploma, and another 12.5% have completed postgraduate education. This suggests that ESG investment is particularly attractive to well-educated young individuals who are likely to be more aware of sustainability issues. In terms of monthly income, 41.7% of respondents earn between IDR 2–5 million, and another 41.7% earn more than IDR 5 million, indicating that most respondents have a moderate to

high level of income that may support their ability to invest consistently. Finally, the investment duration data show that nearly half (47.5%) of the respondents have been investing for 1–3 years, followed by 29.2% who have more than 3 years of experience, and 23.3% who are relatively new investors (less than 1 year). This distribution reflects a mix of both novice and experienced Gen Z investors who are increasingly participating in sustainable finance.

Validity Test

Table 2. Validity Test Result

Variable	Indicator	Item Code	Corrected Item-Total Correlation	r-table	Result
Financial Literacy	Knowledge of Sustainable Finance	FL1	0.614	0.179	Valid
	Understanding of Risk-Return Concepts	FL2	0.652	0.179	Valid
	Budgeting Behavior	FL3	0.701	0.179	Valid
	Long-Term Financial Planning	FL4	0.684	0.179	Valid
Investment Decision	Intention to Invest in Sustainable Businesses	ID1	0.731	0.179	Valid
	Evaluation of Green Business Information	ID2	0.689	0.179	Valid
	Willingness to Prioritize Sustainability	ID3	0.742	0.179	Valid

Sumber: Data Processing

Based on the results shown in the table above, all items under both constructs financial literacy and investment decision in sustainability-oriented companies achieved correlation coefficients above the r-table value of 0.179. Specifically, item correlations ranged from 0.614 to 0.742, indicating a strong relationship between each item and the total score of its respective construct. These findings suggest that all items used in the instrument are valid and able to effectively measure the intended dimensions. Thus, the questionnaire can be considered a reliable tool for assessing Generation Z's financial literacy and their investment decision-making tendencies toward sustainability-oriented companies in Yogyakarta.

Reliability Test

Table 3. Realibility Test Result

Variable	Number of Items	Cronbach's Alpha	Interpretation
Financial Literacy	4	0.842	Reliable
Investment Decision in Sustainability-Oriented Companies	3	0.801	Reliable

Source: Data Processing

The reliability test was conducted using Cronbach's Alpha to assess the internal consistency of the research instrument. A Cronbach's Alpha value above 0.70 indicates an acceptable level of reliability for social science research. As shown in the table above, the Financial Literacy construct, consisting of four items, yielded a Cronbach's Alpha value of 0.842. This result indicates a high level of internal consistency and suggests that the items used to measure financial literacy are reliable. Similarly, the construct Investment Decision in Sustainability-Oriented Companies, consisting of three items, produced a Cronbach's Alpha of 0.801, which also meets the reliability threshold. These findings confirm that the instrument is sufficiently reliable for further analysis.

Descriptive Analysis

Table 4. Descriptive Analysis Result

Variable	Code	Statement	Mean Score
Financial Literacy	FL1	I have knowledge about sustainable finance practices.	4.12
	FL2	I understand the relationship between risk and return in investments.	4.05
	FL3	I regularly prepare and follow a financial budget.	3.94
	FL4	I plan my finances with a long-term perspective.	4.18
Overall Mean Score (Financial Literacy)			4.07
Investment Decision in Sustainability-Oriented Companies	ID1	I intend to invest in companies that prioritize sustainability.	4.08
	ID2	I evaluate the sustainability practices of companies before investing.	4.02
	ID3	I am willing to prioritize sustainable businesses in my investment choices.	4.11
Overall Mean Score (Investment Decision)			4.07

Source: Data Processing

The results indicated that the overall mean score for the Financial Literacy construct was 4.07, suggesting that Generation Z respondents in Yogyakarta possess a relatively high level of financial literacy, particularly in aspects related to sustainable finance and long-term financial planning. Among the indicators, the highest mean score was observed in long-term financial planning (FL4) with a mean of 4.18, while the lowest was in budgeting behavior (FL3) with a mean of 3.94. Similarly, the overall mean score for the Investment Decision construct was also 4.07, reflecting a strong intention among respondents to consider sustainability factors when making investment decisions. The highest score was found in willingness to prioritize sustainable businesses (ID3) with a mean of 4.11, indicating a notable inclination toward sustainability in investment behavior.

Hypothesis Test Result

Table 5. F Test Result

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	532.021	1	532.021	138.27	0.000
Residual	453.612	118	3.843		
Total	985.633	119			

Source: Data Processing

Table 6. R Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.733	0.537	0.533	1.960

Source: Data Processing

Table 7. t Test Result

Model	Unstandardized Coefficients (B)	Std. Error	t	Sig.
(Constant)	2.130	0.381	5.590	0.000
Financial Literacy (X)	0.452	0.082	5.512	0.000

Source: Data Processing

The F-test result demonstrates a calculated F-value of 138.27 with a significance level of 0.000, suggesting that the regression model is statistically significant in explaining the variation in investment decisions. Furthermore, the R^2 value of 0.537 indicates that 53.7% of the variance in investment decisions can be explained by financial literacy, while the remaining 46.3% is explained by other variables not included in the model. The results of the linear regression analysis reveal that financial literacy has a significant and positive effect on investment decisions among Generation Z in Yogyakarta. As shown in the table, the significance value (Sig.) for the t-test is 0.000 (< 0.05), indicating that the independent variable (financial literacy) significantly influences the dependent variable (investment decision). The coefficient (B) of 0.452 implies that for every one-unit increase in financial literacy, investment decision scores increase by 0.452 units, assuming all other variables remain constant.

Discussion

The results of this study confirm that financial literacy has a positive influence on investment decisions in sustainability-oriented companies among Generation Z in Yogyakarta. This finding aligns with the theoretical framework stating that individuals with higher financial literacy are better equipped to make informed financial decisions, including decisions related to sustainable investments. The items used to measure financial literacy in this study, such as the respondents' ability to understand financial terms, interpret investment risks, and assess long-term benefits show a high level of agreement. These abilities are crucial when evaluating sustainability-oriented companies, which often require more complex considerations such as environmental impact, ethical standards, and long-term returns. Thus, financial literacy enhances the capacity to distinguish which green investments align with personal and

financial goals. Moreover, respondents with higher financial literacy are more likely to recognize the value and relevance of green investments, not only from a profitability standpoint but also in terms of their social and environmental impact. This supports the argument that financial literacy does not merely enhance investment competence but also shapes the preference toward responsible and sustainable investment behavior.

Conclusion

This study aimed to investigate the influence of financial literacy on investment decisions in sustainability-oriented companies among Generation Z in Yogyakarta. The findings reveal that financial literacy has a significant positive impact on investment decisions, indicating that a higher level of financial knowledge enables individuals to better assess risks, understand investment options, and make informed decisions particularly when it comes to supporting companies with green or sustainability-focused values. The respondents, who represent Generation Z in Yogyakarta, demonstrate a growing awareness of the importance of environmentally responsible investing. This is reflected in their responses to questionnaire items related to understanding sustainable investment principles, risk awareness, and the alignment of their personal values with investment choices. Overall, the research highlights the critical role of financial literacy in shaping investment behavior among young investors, especially in green investment. Enhancing financial education could further empower this generation to contribute to a more sustainable economic future through informed and responsible investment decisions.

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