



Community Determination Factors Influence the Interest in Investing Retail Green Sukuk: Sustainable Investment as Moderating Variable

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Abstract. The aim of this research is to identify the factors that influence people's interest in investing in Retail Green Sukuk (RGS) across four different age groups (Baby Boomers, Gen X, Gen Y, and Gen Z). The factors considered in the study are investment awareness, subjective norms, social platform influence, risk aversion, and environmental knowledge. The research was based on a questionnaire completed by 500 respondents representing the four age groups in the Jakarta, Bogor, Depok, Tangerang, and Bekasi areas. The data was analyzed using descriptive analysis methods and Partial Least Square–Structural Equation Model (PLS-SEM). The findings of the research indicate that subjective norms, openness, social platform influence, environmental knowledge, and risk aversion, with the moderating variable of sustainable investment intentions, have an impact on the interest in investing in retail green sukuk. The research recommends that the government, as the issuer, and retail green sukuk selling agents collaborate with public figures such as religious leaders, community leaders, academics, and influencers to promote and educate the public about environmentally impactful investments. The channels for this promotion and education could include social media platforms, seminars, and counseling sessions at various campuses, offices, and community gatherings.

Keywords: Community Determination, Sustainable Investment, Green Retail Sukuk.

1 Introduction

The progress of a country can be measured by its economic growth and public infrastructure development. The Government and the Private Sector play crucial roles in achieving the Sustainable Development Goals (SDGs). The OJK's 2020-2024 Sharia Capital Market Roadmap promotes the development of sharia-compliant capital market products based on Socially Responsible Investment (SRI). This plan integrates the principles of Environment, Social, Governance (ESG) into projects, such as the issuance of Green Sukuk. From 2018 to 2022, the Government issued Green Sukuk worth a total of USD 6.945 billion, including 5 times Global Green Sukuk totaling USD 5

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billion, 4 times Retail Green Sukuk (RGS) totaling IDR 21.86 trillion (equivalent to USD 1.495 billion), and 1 time Project-Based Green Sukuk totaling IDR 6.73 trillion (equivalent to USD 450 million [1]). However, the total emission of RGS and Project-Based Green Sukuk, as investment instruments for domestic investors, only reached IDR 28.59 trillion (equivalent to USD 1.945 billion), which is 38.9% of the total emission of Global Green Sukuk. This indicates that there are fewer domestic investors than global investors. To attract more domestic investors, the Government can consider increasing the offering of RGS investments, which have a denomination of IDR 1 million, making it easier and more appealing for domestic retail investors to invest.

In 2021, investors in the RGS ST-008 series, with an emission value of IDR 5 trillion, were predominantly from Generation X (34.14%), Generation Y (33.70%), Baby Boomers (28.40%), and Generation Z (1.06%). However, in 2022, there was a shift in investor dominance. In the RGS ST-009 series, with an emission value of IDR 10 trillion, Generation Y took the lead with 53.89%, followed by Generation X (26.70%), Baby Boomers (16.28%), and Generation Z (1.97%). Based on the last two RGS issuances, there are four age groups of domestic retail investors, namely Baby Boomers (born 1946-1964), Generation X (born 1965-1980), Generation Y (born 1981-1996), and Generation Z (born 1997-2012). Data from the Central Statistics Agency (CSA) in 2022 shows that the total number of these four community groups reached 226.54 million people, equivalent to 82.15% of the total population of 275.77 million people. RGS investments are accessible to both Muslim and non-Muslim investors, with the majority being middle to upper-income groups experiencing a growth of around 7-8% per year.

Researchers have identified several issues related to the objectives of countries issuing Green Sukuk, including the responsibility to play an active role in preserving the environment [2], reducing carbon emissions [3], meeting renewable energy needs [4], forest conservation [5], funding projects that boost economic growth [6], and aspects of economic, financial, and environmental development [7], as well as unique asset diversification based on the type of sukuk [8]. To expand the sukuk market, essential factors are required, including economic size [9], clear sukuk asset standards [10], favorable institutional and legislative rules [2], low issuance transaction costs [11], collateral with minimal risk [12], and the establishment of investor awareness and trust [13]. Investors interested in capital market assets, such as sukuk and stocks, are influenced by various factors. These factors include internal aspects like awareness [14], attitudes, knowledge, and religiosity [15], as well as external factors such as environmental concern and financial literacy [16]. Additionally, other factors like compatibility and intrinsic motivation [17], self-control, optimism, and deliberative thinking [18], trait anxiety and overconfidence [19], Islamic moral values, internal factors (e.g., self-efficacy or reasons and against), external factors (e.g., perceived social support or party others from external sources) and empathy [20], functional values, social values, emotional values, religious values, knowledge values [21]. The study aims to address two key questions: first, how can the issuance of sukuk and stocks help attract retail investors from different age groups, such as Baby Boomers, Gen X, Gen Y, and Gen Z and second what are the implications for the Government in increasing the issuance of sukuk.

2 Research Method

This research involves descriptive quantitative analysis aimed at testing hypotheses and providing a systematic and factual description of the current situation. The study uses both secondary and primary data sources. Secondary data is gathered from journal and book literature, which informed the development of a questionnaire for the respondents. The questionnaire is divided into two parts. The first part focuses on collecting information about the characteristics and demographics of the respondents, while the second part contains qualitative questions related to determining respondents' green investment intention in Retail Green Sukuk using environmental knowledge and green lifestyle variables. Respondents are asked to rate their answers on a four-point Likert scale, ranging from very insignificant (scale 1) to very significant (scale 4).

The respondents provided valuable insights by completing a questionnaire based on Judgment Analysis, reflecting their beliefs about the questions and statements in the survey. The research focused on individuals residing or engaging in activities in the Jakarta, Bogor, Depok, Tangerang, and Bekasi areas. To ensure comprehensive representation, we employed proportional stratified sampling among Baby Boomers, Gen X, Gen Y, and Gen Z, resulting in a diverse sample of 500 respondents. The data analysis was conducted using the advanced Partial Least Square–Structural Equation Model (PLS-SEM) with SmartPLS version 4.0 software. This comprehensive analysis included outer model tests (Convergent Validity, Discriminant Validity, and Reliability) and inner model tests (Path Coefficient), providing a robust foundation for our research findings.

3 Results and Discussion

The methodology involved selecting 500 respondents and collecting demographic data such as gender, age, generation group, marital status, education level, employment type, monthly income, and interest in investing in Retail Green Sukuk. This demographic information is crucial for understanding how it influences the community's interest in investing in Retail Green Sukuk. The dominant criteria observed were: 52.0% female respondents, 25.2% aged 24-27 years, 40.0% belonging to Generation Z, 50.8% married, 41.4% with undergraduate student status, 41.0% working as private employees, and 55.4% earning between IDR 4.000.000 to IDR 8.000.000 per month. Interestingly, 64.4% of respondents expressed interest in Retail Green Sukuk despite not having prior investment experience. Additionally, 46.4% of respondents had a conservative or risk-avoidant risk profile.

Based on the output results from the PLS SEM analysis, 39 indicators explaining 8 variables have met the following criteria: convergent validity (outer loading value > 0.7 ; AVE value > 0.5 ; HTMT value < 0.9) then discriminant validity (cross loading value $>$ other variable values) then multicollinearity test using the VIF test (VIF Value < 5 then reliability test (cronbach's alpha value > 0.7 ; composite reliability value > 0.7) then have good model fit (SRMR value < 0.08 ; NFI value approaching 0.9).

Based on the results of the path coefficient test, the green investment intention in retail green sukuk (GII) is influenced by several important factors, such as environmental knowledge (EK), openness (OP), risk aversion (RA), risky investment intention (RII), subjective norms (SN) social platform influence (SPI), and sustainable investment intention (SI). It's worth noting that an increase of 1 unit in environmental knowledge (EK) corresponds to a 0.042 unit increase in GII interest. Similarly, a 1 unit increase in openness (OP) results in a 0.135 unit increase in GII interest. Moreover, a 1 unit increase in risk aversion (RA) leads to a 0.016 unit increase in GII interest, and a 1 unit increase in risky investment intention (RII) results in a 0.033 unit decrease in GII interest. Additionally, a 1 unit increase in subjective norms (SN) leads to a 0.157 unit increase in GII interest, while an increase of 1 unit in the social platform influence (SPI) results in a 0.303 unit decrease in GII interest. Finally, a 1 unit increase in sustainable investment (SI) corresponds to a 0.294 unit increase in GII interest.

Increasing environmental knowledge (EK) by 1 unit will result in a 0.156 unit increase in the sustainable investment (SI). Similarly, a 1 unit increase in openness (OP) will lead to a 0.228 unit increase in the sustainable investment (SI). Moreover, a 1 unit increase in risk aversion (RA) will result in a 0.090 unit increase in the sustainable investment (SI). Additionally, a 1 unit increase in the risky investment intention (RII) will lead to a 0.064 unit increase in the sustainable investment (SI). Furthermore, a 1 unit increase in subjective norms (SN) will result in a 0.274 unit increase in the sustainable investment (SI). Lastly, a 1 unit increase in the social platform influence (SPI) will lead to a 0.215 unit increase in the sustainable investment (SI).

The research results were obtained using path coefficients. It's worth noting that only one variable, the risky investment intention (RII) on the green investment intention in retail green sukuk (GII), had a negative relationship. Conversely, the other variables exhibited a positive relationship. This indicates that when the value of the independent variable increased, the value of the dependent variable also increased, and if the value of the independent variable decreased, the value of the dependent variable also decreased. This is as seen in Figure 1, which depicts the PLS SEM Model.

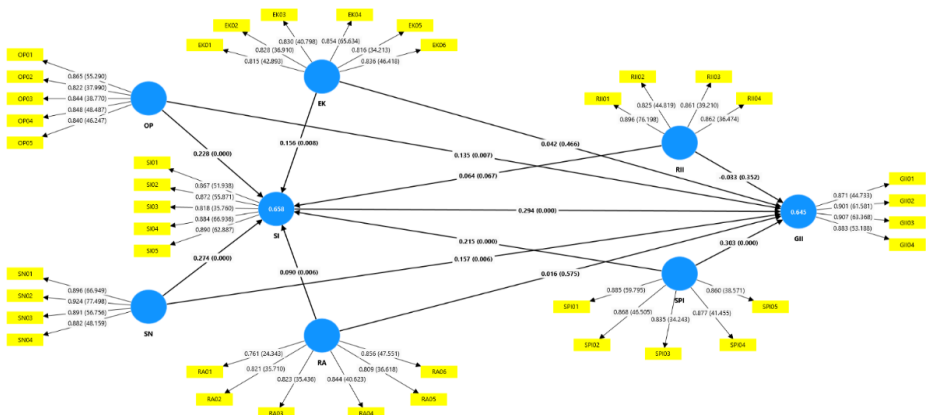


Fig. 1. Path Coefficients Test Result

4 Conclusions

After analyzing the data, we have concluded the following:

1. Environmental knowledge has a positive relationship and influences sustainable investment.
2. Environmental knowledge has a positive relationship but does not influence green investment intention in retail green sukuk.
3. Openness has a positive relationship and influences sustainable investment.
4. Openness has a positive relationship and influences green investment intention in retail green sukuk.
5. Risk aversion has a positive relationship and influences sustainable investment.
6. Risk aversion has a negative relationship and does not influence green investment intention in retail green sukuk.
7. Risky investment intention has a negative relationship and does not influence sustainable investment.
8. Risky investment intention has a negative relationship and does not influence green investment intention in retail green sukuk.
9. Subjective norms have a positive relationship and influences sustainable investment.
10. Subjective norms have a positive relationship and influences green investment intention in retail green sukuk.
11. Social platform influence has a positive relationship and influences sustainable investment.
12. Social platform influence has a positive relationship and influences green investment intention in retail green sukuk.
13. Sustainable investment has a positive relationship and influences green investment intention in retail green sukuk.
14. Environmental knowledge through sustainable investment has a positive relationship and influences green investment intention in retail green sukuk.
15. Openness through sustainable investment has a positive relationship and influences green investment intention in retail green sukuk.
16. Risk aversion through sustainable investment has a positive relationship and influences green investment intention in retail green sukuk.
17. Risky investment intention through sustainable investment has a negative relationship and does not influence green investment intention in retail green sukuk.
18. Subjective norms through sustainable investment have a positive relationship and influence green investment intention in retail green sukuk.
19. Social platform influence through the sustainable investment has a positive relationship and influences green investment intention in retail green sukuk.

5 Recommendations

In order to increase the number of domestic investors in retail green sukuk, it is imperative for the government and agent companies selling retail green sukuk to actively

collaborate with public figures such as religious leaders, community leaders, academics, and influencers to vigorously promote and educate the public about the benefits of environmentally impactful investing. This targeted approach aims to generate keen interest in investing among diverse segments of society. It's essential to emphasize that retail green sukuk is a notably secure investment option, backed by the government. These promotional and educational efforts must be assertively carried out through various channels including social media platforms, dynamic seminars, and proactive counseling sessions at campuses, offices, and within communities.

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References

1. Ministry of Finance Republik Indonesia. (2023). *Green Sukuk Allocation and Impact Report*.
2. Abdullah, M. S., & Keshminder, J. S. (2022). What drives green sukuk? A leader's perspective. *Journal of Sustainable Finance & Investment*, 12(3), 985–1005.
3. Raeni, R., Thomson, I., & Frandsen, A. C. (2022). Mobilising Islamic funds for climate actions: From transparency to traceability. *Social and Environmental Accountability Journal*, 42(1-2), 38–62.
4. Azhgaliyeva, D., Kapoor, A., & Liu, Y. (2020). Green bonds for financing renewable energy and energy efficiency in South-East Asia: A review of policies. *Journal of Sustainable Finance & Investment*, 10(2), 113–140.
5. Rahman, A., Ahmad, A. U. F., Bin-Nashwan, S. A., Muneeza, A., Abdul Halim, A. H., & Markom, R. (2024). Policy approach adopted for issuance of green sukuk: Is priority given to priority needed areas? *Journal of Islamic Accounting and Business Research*, 15(5), 818–837.
6. Bennett, M. S., & Iqbal, Z. (2013). How socially responsible investing can help bridge the gap between Islamic and conventional financial markets. *International Journal of Islamic and Middle Eastern Finance and Management*, 6(3), 211–225.
7. Bennett, M. S., Zhang, B., & Wang, Y. (2021). The effect of green finance on energy sustainable development: A case study in China. *Emerging Markets Finance and Trade*, 57(12), 3435–3454.
8. Syed Azman, S. M. M., Ismail, S., Haneef, M. A., & Engku Ali, E. R. A. (2022). An empirical comparison of sustainable and responsible investment sukuk, social impact bonds, and conventional bonds. *ISRA International Journal of Islamic Finance*, 14(3), 256–273.
9. Smaoui, H., & Khawaja, M. (2017). The determinants of sukuk market development. *Emerging Markets Finance and Trade*, 53(7), 1501–1518.
10. Haji Wahab, M. Z., & Mohamed Naim, A. (2023). Developing Islamic sustainable and responsible investment criteria: An overview. *International Journal of Ethics and Systems*, 39(3), 648–658.
11. Banga, J. (2019). The green bond market: A potential source of climate finance for developing countries. *Journal of Sustainable Finance & Investment*, 9(1), 17–32.

12. Maltais, A., & Nykvist, B. (2020). Understanding the role of green bonds in advancing sustainability. *Journal of Sustainable Finance & Investment*, 1–20.
13. Chowdhury, T. S., & Salema, S. K. (2023). Factors influencing the individual investors of Bangladesh to opt for investment in sukuk. *Islamic Economic Studies*, 31(1/2), 88–107.
14. Warsame, M. H., & Ileri, E. M. (2016). Does the theory of planned behaviour (TPB) matter in sukuk investment decisions? *Journal of Behavioral and Experimental Finance*, 12, 93–100.
15. Farish, N. A. M., & Karim, N. A. (2021). A study on the factors affecting the intention to invest in Islamic socially responsible investment in Malaysia. *Global Business & Management Research*, 13(4).
16. Affandi, M. I., & Rahmawati, F. (2023). Do determinants of behaviors influence the intention to invest in green sukuk? *Jurnal Ekonomi Syariah Teori dan Terapan*, 10(4).
17. Khan, S. U., Khan, I. U., Khan, I., Din, S. U., & Khan, A. U. (2020). Evaluating sukuk investment intentions in Pakistan from a social cognitive perspective. *ISRA International Journal of Islamic Finance*, 12(3), 347–365.
18. Kasoga, P. S., & Tegambwage, A. G. (2022). Psychological traits and investment decisions: The mediation mechanism of financial management behavior—evidence from the Tanzanian stock market. *Journal of Money and Business*, 2(2), 213–227.
19. Rahman, M., & Gan, S. S. (2020). Generation Y investment decision: An analysis using behavioral factors. *Managerial Finance*, 46(8), 1023–1041.
20. Ashraf, M. A. (2023). Theory of Islamic planned behavior: Applying to investors' sukuk purchase intention. *Journal of Islamic Accounting and Business Research*, 14(4), 554–573.
21. Faisal, Y. A., Gunawan, I., Cupian, Hayati, A., Apriliadi, A., & Fajri, M. (2023). Examining the purchase intentions of Indonesian investors for green sukuk. *Sustainability*, 15(9), 7430.

Appendix

Variables	Code	Indicator
Environmental Knowledge	EK01	I am very knowledgeable about how to protect the environment
	EK02	I understand the concept of renewable energy sources
	EK03	I understand the concept of hybrid technology
	EK04	I can list at least five actions to protect the environment in our daily lives
	EK05	I can explain the concept of recycling
	EK06	I often read to learn more about how to save the environment
Green Investment Intention	GII01	I will consider investing in those that have a polluting impact in the future
	GII02	I will consider switching to environmentally investing for ecological reasons
	GII03	Green investments should be obtained because the environmental impact is smaller
	GII04	I plan to spend more on invest in environmentally friendly products rather than conventional products
Openness	OP01	I am a person who likes new ideas
	OP02	I am a person who is curious about various things
	OP03	I am a person who is resourceful
	OP04	I am a person who has an active imagination

Variables	Code	Indicator
Risk Aversion	OP05	I am a person who is inventive
	RA01	I don't like taking risks
	RA02	I am more cautious compared to most people I know
	RA03	I prefer not to bet anything; unlike most people I know
	RA04	I prefer to play it safe rather than be sorry or lose
	RA05	I don't feel the need to take chances on unimportant things
	RA06	I tend to avoid risky situations
Risky Investment Intention	RII01	I generally prefer risky options when making investment decisions
	RII02	I will consider risky investment alternatives when making an investment
	RII03	I have a strong preference for purchasing risky investments
	RII04	I am highly willing to buy risky investments
Sustainable Investment	SI01	I intend to switch from traditional (conventional) investments to invest in sustainable investment fund assets
	SI02	I want to invest in sustainable investments because of their positive environmental impact
	SI03	When choosing between two investments, I prioritize the option that is less harmful to people and the environment
	SI04	I plan to engage in sustainable investments in the coming months.
	SI05	I will incorporate sustainable investments into my investment portfolio
Subjective Norms	SN01	Most important people in my life believe that I should invest in an environmentally friendly manner
	SN02	People whose opinions I value would prefer that I invest in an ecologically friendly manner
	SN03	The most significant individuals in my life are urging me to invest in an environmentally friendly manner
	SN04	The clear perspectives of my friends are motivating me to invest in a green and environmentally friendly manner
Social Platform Influence	SPI01	I believe that people who are environmentally conscious are cool
	SPI02	I believe that people who are environmentally conscious are dedicated environmentalists
	SPI03	My relationships (superiors, partners, family, and friends) support my environmentally conscious behavior
	SPI04	Advertisements, promotions, and product marketing that promote environmentally friendly behavior are appealing
	SPI05	The current global warming situation makes me feel that I need to be someone who cares about the environment

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