

# Analyzing the Influence of Environmental Awareness and Financial Performance in the Desire for Sustainability Investing in Indonesian Investors

Brilyanputra Firjatullah Wahyu<sup>1</sup>, Rofikoh Rokhim<sup>2</sup>

<sup>1,2</sup>Universitas Indonesia, Depok, Indonesia

Email: [brilyanfw@gmail.com](mailto:brilyanfw@gmail.com)

## Abstract

With the development of policies and attention in maintaining environmental sustainability with the phenomenon of global warming and climate change which is an important issue now, this study aims to analyze the priorities of Indonesian investors in investing and its effects in trading activities, the first stage is a comparative study of trading volume variables between issuers that prioritize sustainability and issuers that prioritize the financial side, the first stage will be analyzed by linear regression method independent t-test aims to see if there is a significant difference based on historical trading volume data of both groups of issuers. In the second stage, environmental awareness and financial performance variables are used to see which variable is the biggest influence in investors' choice of investment. A qualitative approach will be used in this study and multiple linear regression will be used to conduct hypothesis testing, data collection will be conducted using an online questionnaire. It was found that investors' preference is now for sustainable investment over conventional, with the most influential factor being financial performance. The results of the qualitative research are supported by the results of quantitative research which found that trading volume activity for sustainable issuers is increasing in the period 2023 and trading volume activity for conventional issuers is decreasing in the period 2023 The findings of this study aim to help other companies to see the importance of environmental awareness factors in front of the eyes of young investors.

**Keywords:** Sustainability Information, Financial Performance, Financial Behavior, Trading Volume.

----- ◆ -----

## A. INTRODUCTION

According to Mankiw (2002) Investment is the act of putting and contributing money into a business with the aim of increasing its wealth. Investment can also be described as the acquisition of goods by people or businesses to increase their capital stock. With increasing awareness of the impacts of climate change has resulted in an increasing shift towards the emergence of another type of investment outside of general investment, namely sustainable investment, defined by Renneboog (2008) as an investment using standards that are not related to the financial success of the company and prioritize sustainable activities. With the launch of the SRI-KEHATI Index on June 8, 2009, a sustainability-based index created by the Indonesia Stock Exchange (BEI) and the Indonesian Biodiversity Foundation (KEHATI) shows that sustainable investment activities are getting more attention in Indonesia.

The main factor in sustainable investment activities is environmental awareness, according to Carmi (2013), which is a behavior that prioritizes environmental awareness, such as pro-environmental behavior. Another variable that influences investor choice is

financial performance, especially from the company's financial statements. Based on research conducted by Nwakaego (2022), a shareholder's investment decision can be greatly influenced by information about profitability that can be found in financial reports and the current market price of common shares owned by investors.

One indicator that can be used to measure investor sentiment is trading volume, defined by Singh (2008) as an indicator of the number of sales of each transaction that occurs on the stock exchange at a certain time and stock, is one indicator that also reflects transaction activity in stocks.

This research is important to better understand the influence of an Indonesian investor's investment choice between environmental awareness and financial performance variables, based on the exposure of previous research, it is concluded that with the development of attention to sustainable investment, the influencing factors such as environmental awareness and financial performance is worth researching.

## **B. LITERATURE REVIEW**

### **1. Financial Behavior**

Previous research conducted by Lee (2021) shows that financial behavior has an impact on the level of individual financial satisfaction. There is also an important correlation between individual financial knowledge and decision-making tendencies in the financial context. An increase in consumers' financial knowledge goes hand in hand with the growth of individuals' confidence in their financial understanding. These elements of confidence and knowledge have been found to be related to Financial Behavior.

Based on Robin (2020) Financial Behavior, seeks to understand how emotional and cognitive factors influence investor behavior. Biases and tendencies have the potential to cause investors to act irrationally and affect their decision-making behavior.

Based on Iman (2022) Human actions in the context of financial behavior include budgeting, managing loan repayments, saving, investing, spending, budgeting, financial planning, making wise purchases, managing credit or cash, retirement planning, and insurance.

### **2. Trading Volume**

Stock trading volume and investor sentiment are strongly correlated, according to research by Güler (2022). The study found that stock trading volume mediates the total effect. The trading volume indicator was also found to be positively correlated with stock performance, refuting the idea that trading volume can be used as a predictor of an issuer's stock performance, according to additional information based on Vasileiou's (2022) research on AMC.

According to the findings of Hoekstra's (2022) study, an important positive correlation was observed in the relationship between investor emotions and stock trading volume. This study suggests that the trading volume variable can be an

indication for assessing the interest and sentiment of investors participating in the capital market.

### **3. Sustainable Investment**

Sustainable Investment also called Responsible Investment or value-based investment involves incorporating environmental factors, social responsibility, and governance capabilities when making investment decisions rather than relying solely on financial considerations (GSIA, 2019). According to Sabastian (2022) Sustainable Investment, as a whole, refers to investment strategies and financial activities that consider governance, social, and environmental factors. ESG stands for Environmental, Social, and Governance, and is often used to refer to Sustainable Investment in some publications.

Stobierski (2022) defines Sustainable Investment as an investment that considers Environmental, Social, and Governance (ESG) elements before making decisions on investment activities in companies or business initiatives. aiming to have a favorable impact on the environment and social environment, these three components are approached in this way.

### **4. Financial performance**

Based on Yenesew (2014) Profit after tax, return on assets (ROA), return on equity (ROE), earnings per share, and any generally accepted market value ratio can be used to measure financial performance. Financial performance increases as ROE increases. The level of dependence of the company on third parties (creditors) and the debt burden (interest costs) that must be borne will be higher with the higher the debt to equity ratio.

In Abdulshakour's research (2020), the measurement of financial performance uses data that generally appears in the financial statements of an issuer because the role of financial statements in is to convey understandable messages to users of accounting information about the issuer's activities.

The desire to invest and receive a high rate of return is what motivates investors or corporate entities to choose issuers with high financial performance Anwaar (2016). Attention to high financial performance will cause an investor to prioritize financial factors, while attention to low financial performance will cause an investor to prioritize other things besides the financial aspects of an issuer.

### **5. Environmental Awareness**

Environmental Awareness is defined as activities that pay attention to environmental issues and actions that lead to the realization of good practices to achieve sustainable environmental conditions. Over the past few decades, modern energy systems have undergone major changes, changes in various aspects due to a number of technical, economic, and environmental factors. One of the biggest is related to climate change, which has changed our energy policy and energy mix to a low-carbon transition Qiu (2022)

In response to the 2015 Paris Climate Agreement to limit global warming to 1.5 °C, countries are increasingly setting goals to achieve net zero emissions in the coming decades. Achieving this goal requires a fundamental transformation of the energy sector, largely based on the accelerated adoption of renewable or low-carbon technologies Hedeler (2022).

Based on Erkal (2016) Several factors, including attitudes towards the environment, environmental awareness, and sensitivity to the environment, have been investigated in the context of scientific investigations related to the environment. To assess environmental awareness and sensitivity. This research that has been conducted on students studying at Hacettepe University, Department of Family and Consumer Sciences, the level of participation in each item included in the 5-point Likert-type scale.

## **6. Correlation Between Primary and Secondary Data**

Measuring the sentiment of investors to a stock can be seen based on the value of trading volume, in line with the findings of Güler's research (2022). with the use of secondary data on trading volume between the two groups of issuers is different, hypothesis 1 in this study will be put forward, namely the existence of significant changes between the trading volume of conventional and sustainable issuers, where if the trading volume of issuers engaged in sustainability is higher and significant will show the sentiment of investors starting to move to the interests of sustainability, while if the trading volume of conventional issuers is higher and significant will show the sentiment of investors not moving to the interests of sustainability.

Primary data directly from investors based on certain variables is also taken into account. Based on Zhang's research (2021), it was found that the Environmental Awareness factor and financial performance are indicators that are highly considered by investors, especially if the method of presenting information is conveyed by the correct method. This is in line with research conducted by Nwakaego (2022) where it was found that financial performance information in financial reports is a significant consideration in the minds of investors and investors will be more reluctant to choose issuers with lower profitability, in line with Zhang's research (2021), namely research conducted by Wahlstedt (2020) where it was found that the majority of investors studied had a tendency to prioritize sustainability factors compared to financial factors. Based on the following previous research, it is found that both environmental awareness and financial performance variables have an influence on investors' choice to make sustainability investments.

In line with this research, hypothesis 2 is examined between Indonesian investors to see whether Environmental Awareness significantly affects the choice of investors to make sustainability investment, where investors with high environmental awareness will prioritize sustainability while low ones will not prioritize sustainability. Then in this study, hypothesis 3 is examined among Indonesian investors to see whether financial performance has a significant effect on investors' choice to make sustainability investment, where investors with high concern for

financial performance will prioritize profitability while low ones will not prioritize profitability over other factors. Based on the exposure, if the trading volume of sustainable issuers is higher and significant, the survey research results will show that the environmental awareness factor is the main driving factor affecting sustainable investment activities. Meanwhile, if the trading volume of conventional issuers is higher and significant, the survey research results will show that the financial performance factor is the main driving factor affecting sustainable investment activities.

### **C. METHOD**

In the quantitative research section, research will be carried out with the independent t test, the T test is a statistical test used to test the hypothesis stating that between two samples used in research from the population, there is or there is no significant difference, in this study the data to be processed is the trading volume of sustainability and conventional issuers in the duration of the last three years.

Qualitative research is intended to provide a way for researchers to understand a phenomenon by observing or interacting with participants in the book Denzin & Lincoln (2008). The ability of the qualitative approach to produce detailed descriptions of participants' mental processes and their tendency to concentrate on the "why" factor is one of the biggest advantages of Qualitative Research Creswell (2003). This research falls into the category of qualitative type research due to the use of survey methods and using the results to test each hypothesis to determine which variables are related to the influence of environmental awareness and financial performance on investor attitudes.

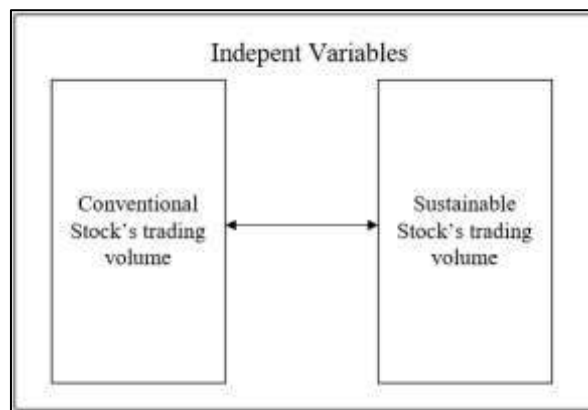
#### **Data Collection Method**

In the quantitative part of the research, data on the last three years' trading volume of twenty-four selected issuers will be used, twelve of which are conventional stocks and twelve are sustainable stocks. The data will be obtained with the help of Refinitiv's EIKON software.

With the help of key respondents such as respondents who know about the topic of the formulation of the problem being studied, the method that can be chosen is to use surveys, demographic analysis, or other methods that can be used to distinguish between ordinary respondents and superior respondents ha this is based on Musarat (2019). In this study, the technique used for data collection is purposive sampling with the criteria of investor domiciled in Indonesia, with an online survey method to respondents.

#### **Research Design**

Based on the research design, data processing is carried out with an independent t-test to compare the trading volume between conventional issuers and sustainable issuers, the research model can be seen below:

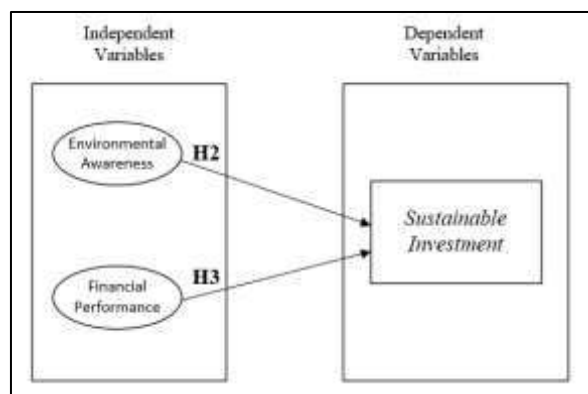


**Figure 1. Research Model for Volume Trading**

Source: Researcher (2023)

Data analysis will be carried out with descriptive statistical analysis to see the difference between the two variables with an independent t-test and to determine whether the two differences are significant.

Based on the research design, linear regression is used to determine the relationship between the influence of the independent variable environmental awareness and financial performance as a moderating variable, the research model can be seen below:



**Figure 2. Research Model for Questionnaire**

Source: Researcher (2023)

Based on research, the linear regression equation model used is as follows:  $SI = \beta_0 + \beta_1 EA + \beta_2 FP + E$

Explanation

- $SI$ : Willingness to make Sustainable Investment
- $\beta_1 EA$ : Environmental Awareness
- $\beta_2 FP$ : Financial Performance
- $\beta_0$ : Population intercept
- $E$ : Error

Based on the model formula, the linear regression equation will be used to see the influence and significance level of the two independent variables and their effect on the dependent variable. Due to the existence of two independent variables, multiple linear regression will be performed.

## Hypothesis

Based on Caporale's research (2022) shows that there is no significant difference between the two types of stocks in terms of persistence levels and dynamic behavior, indicating that stock trading activities no longer only pay attention to financial aspects but other aspects such as ESG. Based on Marsuni's research (2023), it was found that a significant difference between the trading volume of the two groups of issuers could indicate investment preferences after an event that causes changes in trading activity. Based on previous research, the following hypothesis is formed and tested:

**H1:** There is no significant difference between the trading volume of conventional and sustainable issuers.

Based on Wahlstedt's research (2020) it was found that 52.2% of the sample, had strong preferences, larger groups and focused on sustainability and did not pay significant attention to financial aspects. Research conducted by Kouaib (2022) found that the findings show strong evidence that high Environmental Awareness involvement increases investment. Shows that high Environmental Awareness companies experience low information asymmetry and high levels of shareholder harmony, and consequently, good investment policy decisions. Based on previous research, the following hypotheses were tested:

**H2:** Environmental Awareness has a significant effect on the willingness of Indonesian investors to make Sustainable Investment.

Based on Zhang's research (2021) Financial performance considerations by investors greatly influence investment choices, especially if the presentation model uses visuals and percentage figures. Based on Nwakaego (2022) it was found that information regarding the profitability of a company in the financial statements report can significantly influence investors' investment decisions. Based on previous research, the following hypothesis is tested:

**H3:** Financial Performance has a significant effect on the willingness of Indonesian investors to make Sustainable Investment.

## Questionnaire Preparation

### Introduction and Screening

In the first part of the questionnaire, the introduction stage will begin, including the introduction of the researcher, a brief explanation of the research, the purpose of the research, and instructions for answering the questionnaire questions. The respondents will also be informed that the researcher wants their answers to be honest and in line with their own experience.

### Main Questions

The main questions consisted of questions related to the research variables. For questions on Environmental Awareness and Financial Performance variables, a Likert scale of 1-5 with categories of strongly disagree (STS), disagree (TS), neutral (N), agree (S) strongly agree (SS) is used. For Sustainable Investment, yes and no answers are used.

## **Data Processing**

In testing the validity and reliability, a pilot test will be carried out by distributing the survey questionnaire to at least 30 respondents. If the results are as expected, the questionnaire will be distributed again to get more respondents.

## **Validity**

The Validity test will be used to determine whether the measuring instrument used in the study to measure the variables in this study is appropriate. In this study, the Pearson validity test will be used. To find out whether it is valid or not, a comparison of the  $r$  value with the  $r$  table will be made with a significance value of 5%.

## **Reliability**

The reliability test serves to measure how much the variable measuring instrument (questionnaire) can be trusted and find out whether the instrument is consistent if repeated sampling is carried out. In this study, the Cronbach's Alpha technique will be used, and it will look reliable if you get Cronbach's Alpha greater than the value of 0.6.

## **Normality Test**

Normality test is a test used in research, aims to see the value of data distribution in a group of variables or data, to find out whether it is normal or not. In this study, the Kolmogorov Smirnov formula will be used to conduct a normality test. The data will be declared normally distributed if the significance value obtained is greater than 5% (0.05).

## **Homogeneity Test**

Homogeneity test is a testing method in statistics to determine whether two or more samples from different populations have the same distribution of variance or characteristics. In this study, the Levene test will be used to conduct the homogeneity test. The data will be declared homogeneous if the significance value is found to be greater than 5% (0.05).

## **Multicollinearity Test**

The multicollinearity test intends to see whether there is a high level or perfect correlation between the independent variables and not in the regression model used. The correlation model is signaled good if it is found that there is no intercorrelation between independent variables. The method used for this research is to use the Tolerance and VIF (Variance Inflation Factor) methods. If the tolerance value  $> 0.1$  and  $VIF < 10.00$  are obtained, then there are no symptoms of multicollinearity.

Using data obtained from respondents, namely age, gender, and educational background, an explanation is carried out regarding the characteristics of these

respondents and their influence on investors' willingness to make Sustainable Investment.

### Multiple Linear Regression (MLR)

This method is used to see the influence that occurs on the dependent variable caused by more than one independent variable. The data processing process used will be the same as the method used in simple linear regression but the independent variable entered is more than one. In this case there are 2 independent variables, namely sustainability information, and financial performance and the dependent variable Sustainable investment. The following parameters will be considered in the analysis with the MLR method:

### F-test

Conducted with the aim of finding if the independent variable simultaneously affects the dependent variable in the study. The F test is used to determine the simultaneous effect of all independent variables on the dependent variable. By using a significance value of 5%, if the significance value of  $F < 0.05$  it will be concluded that H1 is accepted in the study. With the meaning that all independent or free variables have a significant effect on the dependent or dependent variable.

## D. RESULT AND DISCUSSION

In this study, primary data obtained in the form of *Google forms* were disseminated through social media with personal channels, at the closing of the questionnaire on September 3 - September 25, 2023, there were 628 respondents who had filled out questionnaires, Secondary research data was taken from stock groups in Sri-Kehati and IDX30 mutual funds, based on differences in the priorities of the two mutual funds.

Before the questionnaire was distributed to potential respondents, researchers tested the validity and reliability of the questionnaire questions by conducting a *pilot test* on the first 30 respondents on September 14, 2023. In research, for validity tests used pearson method. instrumen is declared valid if the *person correlation* value in SPSS shows a number above 0.349370 ( $n = 30$ , significance 5%) and a significance value below 0.05.

**Table 1 Validity test results**

| Variable                | Code | R Calculate | Significance | Information |
|-------------------------|------|-------------|--------------|-------------|
| Environmental Awareness | X1,1 | 0,763       | 0,000        | Valid       |
|                         | X1,2 | 0,904       | 0,000        | Valid       |
|                         | X1,3 | 0,930       | 0,000        | Valid       |
|                         | X1,4 | 0,846       | 0,000        | Valid       |
|                         | X1,5 | 0,716       | 0,000        | Valid       |
| Financial Performance   | X2,1 | 0,768       | 0,000        | Valid       |
|                         | X2,2 | 0,836       | 0,000        | Valid       |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Sustainability Investment | X2,3 | 0,792 | 0,000 | Valid |
|                           | X2,4 | 0,912 | 0,000 | Valid |
|                           | X2,5 | 0,896 | 0,000 | Valid |
|                           | X3,1 | 0,932 | 0,000 | Valid |
|                           | X3,2 | 0,944 | 0,000 | Valid |
|                           | X3,3 | 0,893 | 0,000 | Valid |
|                           | X3,4 | 0,902 | 0,000 | Valid |
|                           | X3,5 | 0,953 | 0,000 | Valid |

Source: Researcher (2023)

Seen in the table above, *pearson correlation figures for all instruments from environmental awareness, financial performance, and sustainability investment variables are above 0.349370* with the significance value of all instruments being at 0.000 less than 0.05%. It is concluded that the measuring instruments of variable *environmental awareness, financial performance, and sustainability investment* are valid.

**Table 2 Reliability Test Results**

| Variable                  | Cronbach's Alpha | Information |
|---------------------------|------------------|-------------|
| Environmental Awareness   | 0,859            | Reliable    |
| Financial Performance     | 0,891            | Reliable    |
| Sustainability Investment | 0,956            | Reliable    |

Source: Researcher (2023)

Seen in the table above, *Cronbach's Alpha* numbers for all variables of *environmental awareness, financial performance, and sustainability investment* are above 0.6 with the following means that the instrument is realistic *and can be used for the next stage in research*.

### Normality Test

**Table 3 Normality Test Results**

| Sig. (2-tailed) | Regression Equation                          |
|-----------------|----------------------------------------------|
| 0,197           | $SI = \beta_0 + \beta_1 EA + \beta_2 FP + E$ |

Source: Researcher (2023)

Seen in Table 3 above, the results of analysis with SPSS show that *standardized residuals* are normal, because in accordance with the theory of a group of data said to be normally distributed if the significance is above 0.05, it is found that the significance amounts to more than 0.05 with a number of 0.197. shows that the distribution of data is normal.

### Multicollinearity Test

**Table 4 Multicollinearity Test Results**

| Variable | Tolerance | BRIGHT |
|----------|-----------|--------|
| EA       | 0,10      | 9,884  |
| FP       | 0,10      | 9,884  |

Source: Researcher (2023)

Based on the Multicollinearity test, the regression model does not experience Multicollinearity, because the tolerance value for all variables is above 0.1 with the *tolerance* value at nominal 0.101. In theory, VIF must be below 10 to be declared multicollinearity, the value of VIF was found to be 9.884. It was concluded that there was no correlation between independent variables.

### Heteroscedasticity Test

**Table 5 Heteroscedasticity Test Results**

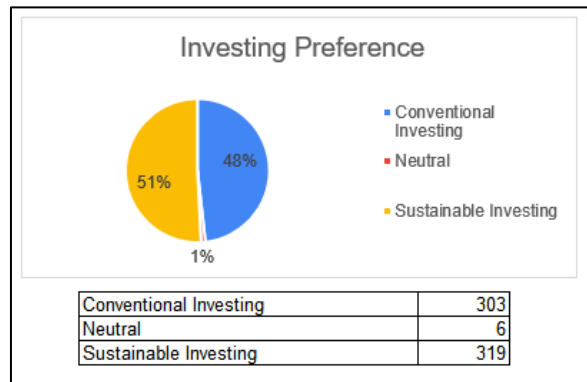
| Variable | Significance |
|----------|--------------|
| EA       | 0,117        |
| FP       | 0,29         |

Source: Researcher (2023)

Based on glacier tests, regression models do not have variance inequalities from residuals of one observation to another. Based on theory, heteroscedasticity does not occur if the significance value is greater than 0.05, Based on the analysis it was found that the *Environmental Awareness* variable has a significance value of 0.117 and for the *Financial Performance* variable has a *significance* value of 0.29 the *significance* of both variables is above 0.05. so that there is no Heteroscedasticity event.

Screening was carried out to filter respondents, given questions about age, domicile, and experience in investing. After screening, it was found that the total number of respondents who met the criteria was 628 respondents.

### Descriptive Analysis



**Figure 3. Respondent Preferences**

Source: Researcher (2023)

Based on the results of the questionnaire, it was found that a total of 303 respondents each had a preference for investing in conventional stocks, worth 48% of the total respondents. It was found that 319 respondents worth 51% of the total had a preference for investing in sustainable stocks. It was found that 6% of the respondents with a total of 6 respondents did not have a preference between conventional or sustainable stocks.



**Figure 4. Respondent Preferences by Gender Category**

Source: Researcher (2023)

The questionnaire results found that the majority of male respondents have a preference for investing in sustainable stocks, out of 346 male respondents around 55% have a preference for sustainable stocks while the minority with a total of 44% still have a preference for conventional stocks. For female investors, out of 282 respondents, the majority still have a preference in conventional stocks with a percentage of 55% of the total respondents, a minority of around 43% already have a preference for sustainable stocks.



**Figure 5. Respondent Preferences by Education Category**

Source: Researcher (2023)

In the aspect of education, it is found that out of 450 respondents who have an undergraduate education level, a percentage of 53% have a preference for conventional stocks to invest in while 46% already have a preference for sustainable stocks. For investors with S2 education with a total of 178 respondents, it was found that a large percentage of around 59% had a preference for sustainable stocks compared to 40% of respondents who prioritized conventional stocks.



**Figure 6. Respondent Preferences by Age Category**

Source: Researcher (2023)

In the aspect of age, it was found that out of 339 respondents who had an age smaller than or equal to 25, 53% of respondents had a preference for conventional stocks to invest in while 46% already had a preference for sustainable stocks. For investors with a Masters education with a total of 229 respondents, it was found that a large percentage of about 52% had a preference for sustainable stocks compared to 43% of respondents who prioritized conventional stocks.

### Multiple Linear Regression

The data processing procedures used will be similar to those used in simple linear regression, with the difference that multiple independent variables are included. This study examines two independent factors, namely sustainability

information and financial performance, and their relationship with the dependent variable of sustainable investment.

### Coefficient of Determination

**Table 6 Coefficient of Determination**

| Variable | R Square |
|----------|----------|
| EA       | 0,962    |
| FP       |          |

Source: Researcher (2023)

Based on the regression results, it is found that the R square value is 0.962, indicating that the willingness to do sustainable investing activities can be explained by the two variables Environmental Awareness and Financial Performance by 96.2% while the remaining 3.8% is explained by other factors.

**Table 7. Coefficient of Determination by Category**

| Gender     | Variable | R Square |
|------------|----------|----------|
| Male       | EA       | 0,775    |
|            | FP       | 0,814    |
| Female     | EA       | 0,861    |
|            | FP       | 0,897    |
| Education  | Variable | R Square |
| Bachelor's | EA       | 0,841    |
|            | FP       | 0,885    |
| Master's   | EA       | 0,731    |
|            | FP       | 0,759    |
| Age        | Variable | R Square |
| ≤25        | EA       | 0,808    |
|            | FP       | 0,841    |
| >25        | EA       | 0,807    |
|            | FP       | 0,853    |

Source: Researcher (2023)

Based on the results of the linear regression, it was found that for males the largest R square is owned by the financial performance variable with a value of 0.884, this is opposite to the general preference found. this could be due to the financial information in the questionnaire is not satisfactory and an increase in financial information or performance could change the stock preference to conventional stocks.

The female gender is seen to be strongly influenced by financial aspects, with a value of 0.897 for the coefficient of determination of financial performance. This is in line with preferences indicating that for the male gender financial factors are the main consideration in choosing the type of stock and for this period the male gender still has a preference in conventional stocks.

In the Bachelor's degree education category, it is found that the financial performance factor is also the biggest influence, with a value of 0.841 for the r square of the environmental awareness variable and a value of 0.885 for the financial performance variable, indicating that for respondents with undergraduate education, the financial information factor is the main impetus in line with the preference results. Respondents with Masters education also still prioritize financial information, but it

can be noted that the difference in the determination value between the two variables is relatively small with a value of 0.28.

In the age category, both groups of respondents with ages equal to under 25 and over 25 are still strongly influenced by financial statements. Respondents with an age equal to under 25 have an r square value of 0.841 for the financial performance variable and for respondents with an age above 25 have an r square value of 0.853. Overall, each type of respondent is still strongly influenced by investment choices by reports from the financial side.

The majority of the results of the coefficient of determination analysis are in line with the research of Nwakaego (2022) and Abdulshakour (2020) who found that financial information from an issuer affects investor decision making in making investment choices.

### F-test

**Table 8. F-Test**

| Variable | F         | F Count  | Sig   |
|----------|-----------|----------|-------|
| EA       | 7,830,170 | 3.010137 | 0.000 |
| FP       |           |          |       |

Source: Researcher (2023)

Based on the results of the linear regression, it is found that the F value is far above the F table, indicating that the Environmental Awareness and Financial Performance variables together have a simultaneous influence on sustainable investment activities.

### Hypothesis

**Table 9. Hypothesis**

| Variable | $\beta$ | Sig   |
|----------|---------|-------|
| EA       | 0.27    | 0.000 |
| FP       | -0.72   |       |

Source: Researcher (2023)

### Environmental Awareness Hypothesis

Based on the results of the analysis, it is found that there is a significant relationship with a p-value of 0.27, indicating that there is a unidirectional influence between the environmental awareness variable and the sustainable investment variable. with the following, H1 is accepted.

### Financial Performance Hypothesis

Based on the results of the analysis, it is found that there is a significant relationship with a p-value of -0.72, indicating that there is an opposite effect between the financial performance variable and the sustainable investment variable. with the following, H1 is accepted.

## Secondary Data Analysis

A comparison of stock trading frequency between stocks that prioritize sustainability and liquidation aspects is carried out to see the level of activity between the two groups of issuers. 12 issuers per group are used, for stocks that prioritize sustainability are taken from the SRI-KEHATI stock mutual fund and for stocks that prioritize liquidation aspects, stocks included in the IDX30 mutual fund will be used.



**Figure 7. Trading Volume**

Source: Researcher (2023)

It can be seen in Figure 7 that for Conventional stocks since the 2nd quarter 2022 period, this group of stocks has experienced a continuous decline despite the high frequency of trading carried out, the most significant decline occurred from the 3rd quarter 2022 period to the 3rd quarter 2022 period, and continued to decline after that period, indicating a possible loss of preference for conventional stocks.

The trading volume for sustainable stocks, while continuing to be below that of conventional stocks, shows a much more stable movement in activity since the quarter 2 period of 2022. It can be seen in the chart that for the sustainable stock group there has been a continuous increase since quarter 1 of 2023, the increase causing the difference between the activity of the two groups of stocks to be less, indicating an increase in the activity of sustainable stocks.

Global economic uncertainty is the main cause of the increase in the SRI-KEHATI rate in 2023. Starting with the worldwide decline in commodity prices, especially coal, which was the main focus in 2022. The Federal Reserve (Fed) interest rate policy remains volatile. The aim is to gradually raise interest rates until the inflation target of 2% is achieved, which currently stands at 4%.

## Independent T-test Analysis

**Table 10. Independent T-test**

| Saham          | Normalitas | Signifikansi<br>Levene's test | Signifikansi<br>(2-tailed) |
|----------------|------------|-------------------------------|----------------------------|
| Konvensional   | 0.131      | 0.117                         | 0.094                      |
| Sustainability | 0.402      |                               | 0.095                      |

Source: Researcher (2023)

It can be seen in table 5 that the significance for Levene's test for both groups of issuers is above 0.05 at 0.117, indicating that the two samples have the same variance. The 2-tailed significance that is above 0.05 for both variables, where for sustainable

issuers it is found that the 2-tailed significance is at 0.095 and for the conventional issuer group shows 0.094, indicating that although different, the difference is not significant, this finding is in line with Caporale's research (2022), which also found that although different there is no significant difference between the two issuer groups. Based on this hall, it is found that hypothesis H1 is accepted.

This finding shows that attention and stock activity are no longer motivated solely by financial aspects, although there are still fewer insignificant differences, indicating the emergence of new considerations in investment choices, especially in terms of ESG.

## E. CONCLUSION

This study aimed to investigate the impact of investors' concerns and preferences on environmental or sustainability factors and financial factors in their willingness to engage in sustainable investing. The study draws several noteworthy conclusions. Firstly, while the trading volume for conventional stocks remains higher than that for sustainable stocks, the difference is not significant. However, a noteworthy finding is the substantial decrease in the trading volume of conventional stocks starting from the 3rd quarter of 2022, coupled with an increase in the trading volume for sustainable issuers since the 1st quarter of 2023. Secondly, the research reveals that environmental awareness significantly and positively influences the inclination to make sustainable investments. On the other hand, the third key conclusion indicates that financial information has a significant but negative impact on the desire to engage in sustainable investments.

Despite these findings, it is crucial to acknowledge certain limitations in the research implementation. Firstly, the samples were drawn from the IDX30 and SRI-KEHATI mutual fund groups, and a larger sample size could provide a more accurate depiction of the differences in stock trading activity between these groups. Additionally, the use of the questionnaire method for primary data research may limit the depth of understanding compared to direct interviews, which could offer more nuanced insights into the mindset and driving factors of Indonesian investors in their willingness to pursue sustainable investing. Lastly, with only 628 respondents in the primary data research, a larger and more diverse sample size could better represent the diverse population of Indonesian investors.

## REFERENCES

1. Abdulshakour, S. (2020). Impact of financial statements for fi (Caporale, Gil-Alana, Plastun, & Makarenko, 2022) nancial decision-making. *Open Science Journal*, 5(2), 1–31. <https://doi.org/10.23954/osj.v5i2.2260>
2. Anderson, A. M., & Dyl, A. E. (2019). Trading Volume: NASDAQ and the NYSE. *Financial Analysts Journal*, 63(3), 79-86.
3. Caporale, G. M., Gil Alana, L., Plastun, A., & Makarenko, I. (2022). Persistence in ESG and conventional stock market indices. *Journal of Economics and Finance*, 46, 678–703

4. Carmi, N. (2013). Caring about tomorrow: Future orientation, environmental attitudes and behaviors. *Environmental Education Research*, 19(4), 430–444. <https://doi.org/10.1080/13504622.2012.700697>
5. Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2 ed.). Denzin, K. N., & Lincoln, S. Y. (2008). The landscape of qualitative research. Sage Publications.
6. Fachrudin, K. A., Pirzada, K., & Iman, M. F. (2022). The role of financial behavior in mediating the influence of socioeconomic characteristics and neurotic personality traits on financial satisfaction. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2080152>
7. Gutsche, G., Nakai, M., & Arimura, T. H. (2021). Revisiting the determinants of individual sustainable investment—The case of Japan. *Journal of Behavioral and Experimental Finance*, 30, 100497. <https://doi.org/10.1016/j.jbef.2021.100497>
8. Hedeler, B., Hellsmark, H., & Söderholm, P. (2023). Policy mixes and policy feedback: Implications for green industrial growth in the Swedish biofuels industry. *Renewable and Sustainable Energy Reviews*, 173(December 2022). <https://doi.org/10.1016/j.rser.2022.113098>
9. Hoekstra, J., & Güler, D. (2022). The Mediating Effect of Trading Volume on the Relationship between Investor Sentiment and the Return of Tech Companies. *Journal of Behavioral Finance*, 0(0), 1–18. <https://doi.org/10.1080/15427560.2022.2138394>
10. Irfan, M. (2020). Do Google Trends and Shariah Compliant Stocks Co-Integrated? An Evidence from India. *International Journal of Islamic Economics and Finance (IJIEF)*, 3(2), 227–250. <https://doi.org/10.18196/ijief.3228>
11. Khan, M. U., & Bin Tariq, Y. (2023). Synergy or too big to fail: Empirical analysis of mergers and acquisitions in SAARC and ASEAN regions. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2172023>
12. Kouaib, A., & Amara, I. (2022). Corporate Social Responsibility Disclosure and Investment Decisions: Evidence from Saudi Indexed Companies. *Journal of Risk and Financial Management*, 15(11). <https://doi.org/10.3390/jrfm15110495>
13. Lagerkvist, C. J., Edenbrandt, A. K., Tibbelin, I., & Wahlstedt, Y. (2020). Preferences for sustainable and responsible equity funds - A choice experiment with Swedish private investors. *Journal of Behavioral and Experimental Finance*, 28, 100406. <https://doi.org/10.1016/j.jbef.2020.100406>
14. Lee, Y. G., & Dustin, L. (2021). Explaining Financial Satisfaction in Marriage: The Role of Financial Stress, Financial Knowledge, and Financial Behavior. *Marriage and Family Review*, 57(5), 397–421. <https://doi.org/10.1080/01494929.2020.1865229>
15. Mahajan, S., & Singh, B. (2008). An Empirical Analysis of Stock Price-Volume Relationship in Indian Stock Market. *Vision: The Journal of Business Perspective*, 12(3), 1–13. <https://doi.org/10.1177/097226290801200301>
16. Mankiw, N. G. (2002). Macroeconomics.
17. Moreno, K. K., & Zhang, Y. (2021). The Impact of the Big Fish Effect on Investor Reactions to Financial and Nonfinancial Disclosure. *Journal of Behavioral Finance*,

- 22(2), 113–125. <https://doi.org/10.1080/15427560.2020.1771716>
18. Musarat, S., Sudepta, P., & Ranajee, R. (2019). Qualitative Techniques for Workplace Data Analysis. doi:10.4018/978-1-5225-5366-3.ch002
19. Onyekachi, S. N. (2020). Share Prices, Performance Information of Financial Statements and Shareholders' Investment Decisions. *Covenant Journal of Business & Social Sciences*, 11(1). <https://doi.org/10.47231/qigh7982>
20. Park, I., & Yoon, B. (2018). Technological opportunity discovery for technological convergence based on the prediction of technology knowledge flow in a citation network. *Journal of Informetrics*, 12(4), 1199–1222. <https://doi.org/10.1016/j.joi.2018.09.007>
21. Preis, T., Moat, H. S., & Eugene Stanley, H. (2013). Quantifying trading behavior in financial markets using google trends. *Scientific Reports*, 3, 1–6. <https://doi.org/10.1038/srep01684>
22. Qiu, D., Wang, Y., Hua, W., & Strbac, G. (2023). Reinforcement learning for electric vehicle applications in power systems: A critical review. *Renewable and Sustainable Energy Reviews*, 173(October 2022), 113052. <https://doi.org/10.1016/j.rser.2022.113052>
23. Renneboog, L., Ter Horst, J., & Zhang, C. (2008). The price of ethics and stakeholder governance: The performance of socially responsible mutual funds. *Journal of Corporate Finance*, 14(3), 302–322. <https://doi.org/10.1016/j.jcorpfin.2008.03.009>
24. Robin, R., & Angelina, V. (2020). Analysis of the Impact of Anchoring, Herding Bias, Overconfidence and Ethical Consideration Towards Investment Decision. *JIMFE (Jurnal Ilmiah Manajemen Fakultas Ekonomi)*, 6(2), Inpress. <https://doi.org/10.34203/jimfe.v6i2.2558>
25. Rozen-Bakher, Z. (2018). Comparison of merger and acquisition (M&A) success in horizontal, vertical and conglomerate M&As: industry sector vs. services sector. *Service Industries Journal*, 38(7–8), 492–518. <https://doi.org/10.1080/02642069.2017.1405938>
26. Sandi Marsuni, N., Habbe, H., & Nogu, N. (2023). *Comparative analysis of Abnormal Return and Trading Volume Activity Before and After the Announcement of the Covid 19 Pandemic-In financial companies listed on the Indonesia Stock Exchange (IDX)*. 05(01), 65–78. <https://journal.unismuh.ac.id/index.php/invoice>
27. Saunders, M. N. K., Altinay, L., & Riordan, K. (2009). The management of post-merger cultural integration: Implications from the hotel industry. *Service Industries Journal*, 29(10), 1359–1375. <https://doi.org/10.1080/02642060903026213>
28. Stobierski, T. (2001). Business insights. *Chemical and Engineering News*, 79(40), 45. <https://doi.org/10.1021/cen-v078n032.p049>
29. Sudjiono, A. (2010). *Pengantar Statistik Pendidikan*. Jakarta: Rajawali Press.
30. Szczygielski, J. J., Charteris, A., Bwanya, P. R., & Brzeszczyński, J. (2023). Google search trends and stock markets: Sentiment, attention or uncertainty? *International Review of Financial Analysis*, 102549. <https://doi.org/10.1016/j.irfa.2023.102549>
31. Tobing, Kevin Sebastian Josua L., W. S. (2022). *Investment Di Pasar Modal Indonesia Sebagai Instrumen Investasi Dalam Penerapan Sustainable Investment*

- Di Pasar Modal Indonesia Kevin Sebastian Josua L. Tobing, Wenny Setiawati. *Technology and Economics Law Journal Volume*, 1(1), 19–35. <https://scholarhub.ui.ac.id/telj/vol1/iss1/2>
32. Uyanık, G. K., & Güler, N. (2013). A Study on Multiple Linear Regression Analysis. *Procedia - Social and Behavioral Sciences*, 106, 234–240. <https://doi.org/10.1016/j.sbspro.2013.12.027>
  33. Vasileiou, E., & Tzanakis, P. (2022). The Impact of Google Searches, Put-Call Ratio, and Trading Volume on Stock Performance Using Wavelet Coherence Analysis: The AMC Case. *Journal of Behavioral Finance*, 0(0), 1–9. <https://doi.org/10.1080/15427560.2022.2100384>
  34. Xiao, J. J. (2016). Handbook of Consumer Finance Research: Second Edition. *Handbook of Consumer Finance Research: Second Edition, January 2008*, 1–376. <https://doi.org/10.1007/978-0-387-75734-6>
  35. Yenesew, A. (2014). Determinants Of Financial Performance: A Study On Selected Micro Finance Institutions In Ethiopia. In *School of Graduate Studies of Jimma University* (Vol. 1, Issue 2).
  36. Yilmaz, N., & Sibel, E. (2017). Determining undergraduate students' environmental awareness and environmental sensitivity. *World Journal of Environmental Research*, 6(2), 67–74. <https://doi.org/10.18844/wjer.v6i2.1631>
  37. Zhang, J., Ahammad, M. F., Tarba, S., Cooper, C. L., Glaister, K. W., & Wang, J. (2015). The effect of leadership style on talent retention during Merger and Acquisition integration: evidence from China. *International Journal of Human Resource Management*, 26(7), 1021–1050. <https://doi.org/10.1080/09585192.2014.908316>