Causality of Financial Literacy and Non-Financial Information to Investment Decisions (Experimental Study)

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ABSTRACT

The Covid-19 outbreak has hit various sectors of the economy, such as the capital market. The decline in IHSG made the number of investors increase to 15.96%. However, the increase in the number of investors is not supported by good financial literacy and sufficient non-financial information. If it is associated with signal theory, a person will react when he hears certain information that has an impact on his investment decisions. The purpose of this study is to test the main effect and interaction effect of financial literacy variables and non-financial information on investment decisions using experimental study research methods. This study used a factorial pattern of 2 x 2 between-subject and the sample used was 5th semester students. The data analysis technique will use Analysis of Variance (ANOVA) The results of the main effect state that the two variables have an influence on investment decisions while the interaction effect does not occur between the two variables on investment decisions.

Keywords: Financial Literacy; Non-Financial Information; Financial Decisions

Kausalitas Literasi Keuangan dan Informasi Non-Keuangan terhadap Keputusan Investasi (Studi Ekperimental)

ABSTRACT

Wabah Covid-19 melanda ke berbagai sektor ekonomi, seperti pasar modal. Anjloknya IHSG membuat jumlah investor meningkat menjadi 15.96%. Namun, kenaikan jumlah investor tidak didukung dengan literasi keuangan yang baik dan informasi non keuangan yang cukup. Jika dikaitkan dengan teori sinyal, seorang akan bereaksi ketika mendengar informasi tertentu yang berdampak terhadap keputusan investasinya. Tujuan penelitian ini adalah menguji main effect dan interaction effect dari variabel literasi keuangan dan informasi non keuangan terhadap keputusan investasi dengan menggunakan metode penelitian studi eksperimental. Penelitian ini menggunakan pola faktorial 2 x 2 between-subject dan sampel yang digunakan adalah mahasiswa semester 5. Adapun teknik analisis data akan menggunakan Analysis of Variance (ANOVA) Hasil dari main effect menyatakan kedua variabel tersebut memiliki pengaruh terhadap keputusan investasi sedangkan untuk interaction effect tidak terjadi antara kedua variabel tersebut terhadap keputusan investasi.

Kata Kunci: Literasi Keuangan; Informasi Non Keuangan; Keputusan Investasi.

Artikel dapat diakses: https://ojs.unud.ac.id/index.php/Akuntansi/index
INTRODUCTION
The discovery of a new coronavirus disease 2019 in early 2020 shocked the entire world (Covid-19). The coronavirus that causes Covid-19 is exceptionally lethal and spreads quickly (Qu et al., 2020). Since the World Health Organization (WHO) declared this virus a global health emergency, its presence has severely impacted the global economy. According to Darmayanti et al. (2021) the Covid-19 outbreak affected various economic sectors, including the capital market.

The Indonesia Central Securities Depository (2022) states that there has been a 15.96% increase in stock investors since 2021, from approximately 3.4 million in 2021 to approximately 4 million investors at the end of June 2022. This rise began when Covid-19 arrived in Indonesia. According to a survey conducted by The Financial Services Authority (2022) for the 2022 period, the Indonesian population's financial literacy index is still shallow at around 49%. However, the index value has increased compared to 2019, around 38%. From this, the Indonesian people need more financial literacy, particularly in terms of money rotation, and need to be aware of financial services and products offered by banks. Although the level of financial literacy in the Indonesian population has increased, when compared to other Southeast Asian countries, Indonesia remains very low.

According to Nofriani & Harahap (2022), the influence of risk, the influence of returns, the influence of motivation, the influence of financial literacy, and the influence of benefits on potential investors can influence fund owners to invest in the capital market. According to Nada & Syaiful (2022), the desire to invest needs to be supported by adequate financial literacy. This argument, in line with the theory of planned behavior, states that investment desire is influenced by several subjective norms expressing a person's interest in investing when listening to information, invitations, or environmental experiences. According to research, financial literacy and investment decisions have been linked (Adil, 2021). According to the study, financial literacy significantly impacts investment decisions. This result is consistent with Hamza (2019) research, which shows that financial literacy levels can significantly impact investment decisions.

According to Jogiyanto (2015), event studies using dividend distribution can be used to test market reactions. Furthermore, when a company declares that it will distribute dividends, it is considered good news by investors. In contrast, when a company declares that it will not distribute profits, it is considered bad news by investors. Both of these conditions can be described as earnings surprises; positive earnings surprises are expected to result in a positive market reaction, as explained by Sekaranti & Juliarto, (2022). Information obtained from this source can influence an investor's investment decisions.

Upadana & Herawati (2020) states that investing requires speed and accuracy in making decisions in every decision taken that will affect the results of the investment obtained. Investors' decisions exhibit logical and illogical behavior depending on the news. Because the investor understands non-financial information, an investor with very high financial literacy can be used to control emotions better when determining investments, which are currently very diverse.
Gunaasih (2015) research expose that the variable earning surprise will give a positive response by the market if it is in a state of positive signals. This response indicates a reaction when the company's financial condition is reported. Furthermore, there is positive information content that can cause a market reaction that leads to the conclusion that a positive market reaction indicates a buying decision when there is a positive signal or good news.

Hanifah et al. (2022) and Putri (2021) in this research used a descriptive quantitative research method with analytical tools such as validity and reliability tests and mediation effects, financial Literacy significantly influences investment decisions. According to Angraeni & Almilia (2017) and Dison (2020), non-financial information has a significant favorable influence on investment decisions. The research method is descriptive quantitative, with analytical tools such as the normality test and the mann-whitney difference test.

Based on the explanation above, the increase in the number of investors makes researchers interested in researching an investor's investment decisions if given certain conditions. The purpose of this study is to test the main effects of financial literacy variables and non-financial information, as well as the interaction effect of financial literacy variables and non-financial information when faced with certain conditions using experimental study. This research can be used as a consideration for an investor if faced with conditions according to the variables tested. This research model is depicted in figure 1 below based on the presentation above.

Suganda (2018) in the work made on the Theory and Discussion of Indonesian Capital Market Reactions, the author explained that: "Signaling theory is a theory used to understand actions by management to convey information to investors so that in the end it can make investors change decisions in seeing the condition of the company." Information received by investors can be described as bad news or good news. Good news here is described if business conditions and prospects are still good such as dividend sharing information, news about the company's future prospects etc. and if the company's conditions and prospects are...
still good, it includes good news for investors so that it can be said that information has a very important role for business people or investors, this is because the information obtained can be one of the analytical tools for decision makers of an investment. In addition, a person must also have sufficient financial literacy so that the information he receives can be properly studied so that it will affect the investment decisions he will make.

Financial Literacy is a campaign of activities aimed at improving the skills, knowledge, and confidence of the entire community as well as consumers in order for them to be able to manage their finances effectively (OJK, 2013). According to Kumar et al. (2017), financial Literacy is the process of an individual carrying out financial management with the ability to know in finance.

Putri (2021) and Faalih (2020) conducted previous research on financial literacy's impact on investment decisions. This is in line with research conducted by Hassan & Anood (2009). According to the findings of his study, financial literacy variables have a significant impact on investment decisions. However, this differs from (Yundari & Artati, 2021). According to the study's findings, financial Literacy had no significant impact on private employees' investment decisions. Researchers are interested in implementing the research with its renewal using experimental study methods due to the differences in these variables. The hypotheses that will be proposed are based on the explanation above.

H1: Individuals with high financial Literacy make better investment decisions than individuals with low financial Literacy.

Numerous factors can influence an individual's decision to invest. Wahyuni (2012) investigates how previously received information can influence individuals investment decisions. Alvia (2009), researched to determine the effectiveness of combined information on various presentation patterns and technical analysis understanding in carrying out actions to make investment decisions.

Dison (2020) and Angraeni & Almilia (2017) conducted previous research on the effect of non-financial information on investment decisions. This is in line with research conducted by Naveed et al. (2020). To his study, information variables play a role in changing a belief, so decision-making actions can be altered when new information is received. This research differs from Septyato & Adhikara (2013) findings and Yuwono (2020) findings. His findings indicate that the role of accounting information has no significant impact on an investor's investment decisions. The researchers in this study are interested in exploring the influence of information variables on investment decisions. This research uses an external study method, distinguishing it from previous studies. The hypotheses that will be proposed are based on the explanation above.

H2: Individuals who receive good news make better investment decisions than those who receive bad news.

According to Alvia (2009) research, there are differences in decision-making based on the technical analysis between groups that understand technical analysis and those that do not. The understanding leads to the conclusion that financial literacy is essential in decision-making.

For an investor, information is a signal that can influence cognitive processes because it informs them about the company's prospects, financial
performance, uncertainty, expectations, and management accountability to stakeholders (Bruns, 1968). As a result, the information signal can be interpreted as either good or bad news. The picture of good and bad news is a picture of expected returns and risk, which will influence investors' investment decisions. Considering how financial Literacy and information are interconnected, if an event impacts the company, an investor with high financial Literacy will make better investment decisions.

According to the previous presentation, each variable is already related to investment decisions. Because there has been little research linking financial Literacy and non-financial information, researchers are interested in studying both variables concurrently with investment decisions. The hypotheses that will be proposed are based on the explanation above.

H3: Individuals with high financial Literacy who receive good news tend to make better investment decisions than individuals with low financial Literacy who receive bad news.

RESEARCH METHODS
Experimentation was used in this study. The experimental method is a picture of research carried out to follow up on a phenomenon by controlling or manipulating conditions under established procedures, which are then carried out by observing and interpreting the results of these conditions. A pure experimental study was used as the research method (Nahartyo, 2012).

This study employed a 2 x 2 between-subject factorial design with financial literacy factors (Level I: high; Level II: low) and non-financial information (Level I: Good News; level II: Bad News). The following is a study design table, namely:

<table>
<thead>
<tr>
<th>Financial Literacy</th>
<th>Non-Financial Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good News</td>
</tr>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

In this study, samples will be collected using the purposive sampling method, which means that the samples chosen to meet a specific criterion. This study will use participants from the S1 Accounting Study Program 5th semester at UIN Maulana Malik Ibrahim Malang who have taken or are currently taking Bank and LKBB, Financial Management I, and Financial Management II courses. The reason why researchers choose students as research subjects is that the aspects studied are related to behavioral or psychological aspects, which are assumed to be no different from investors in general, so they are considered capable of being research subjects in investment decision-making tasks (Abdani & Nurdin, 2019). The sampling technique for this study is divided into four stages.

This pilot test is very important to do it is used to understand the validity of the experimental procedure, the material validity of the case and the perfection of the experimental design. At this stage, it is carried out to understand the extent of the success of this study. Improvements will continue to be made in order to achieve research perfection, with the existence of pilot tests so that it is hoped that the real experiments can be obtained quite well.
During this phase of the study, participants underwent only 1 of 4 different conditions and received a package of case materials before the start of the experiment. The experimenter then shares instructions and case materials. Instructions are read and explained not only by participants, but also by researchers. Case material should not be opened until the instructions have been read and there are instructions from the experimental officer.

The success of this manipulation is that a researcher must be able to design a check on cases that have been given to participants (Nahartyo, 2012). Checking manipulations can be carried out in various ways depending on the characteristics and conditions of a study. For this study, manipulation will be checked by giving 4 questions to participants and participants will do it. This check aims to ensure that participants have been manipulated by the financial literacy and information conditions of the case. In addition, the researcher’s way to ensure the validity of this study is by the manipulation check test.

Demographic tests are carried out to understand how the descriptive statistical conditions of all participants are. This is done to understand the data in the form of gender, age, work experience, level of education, and the criteria required for participants, namely having, or are taking Bank and LKBB courses, Financial Management I and II.

Financial literacy is described in the form of a pocketbook regarding the analysis of financial statements and financial ratios for high financial literacy while for low financial literacy it will not be given a pocketbook. The information variable is described in the form of coal prices rising in good news conditions and the issue of coal-fired power plants being closed to be replaced by environmentally friendly energy in bad news conditions.

Before hypothesis testing is carried out, independent variables must be free from disruptive variables, so to see if the independent variables are not affected by disruptive variables, namely by randomization testing. The randomization test will later test whether gender, experience, GPA, and age affect independent variables or not. If any of the disruptor variables affect an independent variable, additional testing is required using Analysis of Covariance (ANCOVA). As a hypothesis testing tool, Analysis of Variance (ANOVA) will be used in this study. Anova is a statistical method for testing one dependent variable against one or more independent variables in a study (Ghozali, 2006).

RESULTS AND DISCUSSION

Researchers conduct pilot tests to determine whether the experimental procedures, case materials, and experimental designs designed can function correctly. Because of the existence of this pilot test, researchers can get various inputs and improvements from participants regarding the case material that has been shared so that the experiments that will be carried out can run well and smoothly. On November 21, 2022 Accounting S1 student of islamic state university Maulana Malik Ibrahim Malang underwent a pilot test. A total of 20 people took part in this pilot test. The following are descriptive statistics on the response to investment decisions in the pilot test.
Table 2. Descriptive Statistics Regarding Investment Decision Response in Pilot Test

<table>
<thead>
<tr>
<th>Information</th>
<th>Good News</th>
<th>Bad News</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (N=4)</td>
<td>Mean=5 std=0.82</td>
<td>Mean=3 Std=1.26</td>
</tr>
<tr>
<td>Group 2 (N=6)</td>
<td>Mean=3.20 std=1.64</td>
<td>Mean=3.20 std=1.64</td>
</tr>
<tr>
<td>Group 3 (N=5)</td>
<td>N=9 mean=4 std=1.16</td>
<td>N=10 mean=3.8 std=1.08</td>
</tr>
<tr>
<td>Group 4 (N=5)</td>
<td>N=11 mean=3.09 std=1.43</td>
<td>N=20 mean=3.50 std=1.40</td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

After this pilot test, researchers met with participants to solicit feedback and criticism on the case material provided. Researchers will use these participants' suggestions and criticisms as material for consideration and improvement of case materials to produce better case materials. Participants made the following suggestions and criticisms: Make the case material more appealing to the participants, it was colored; On case material, incorrect sentence fixes; There are still sentences in Cases II and IV that contain good news, so they should be removed.

This experiment was carried out on S1 Accounting students at Maulana Malik Ibrahim State Islamic University (UIN) in the 5th semester on December 5, 6, and 7, 2022. The number of participants from each experiment carried out on the above date is 19 participants, 23 participants, and 38 participants, for a total of 80 experimental participants. In this experiment, randomization was used in the material division of cases, where participants received only one of the four meters of cases presented, and no consideration was given to the participants' characteristics.

This experiment includes four manipulation check questions related to the case material. To proceed to hypothesis testing, participants must correctly answer all four questions.

Table 3. Distribution of Participants Who Persisted in the Experiment and Failed to Persist in the Experiment

<table>
<thead>
<tr>
<th>Information</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Initial Participants</td>
<td>23</td>
<td>18</td>
<td>17</td>
<td>22</td>
<td>80 (100%)</td>
</tr>
<tr>
<td>Did Not Pass the Manipulation Test</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>16 (20%)</td>
</tr>
<tr>
<td>The number of final participants proceeded to the subsequent analysis</td>
<td>20</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>64 (80%)</td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

According to Table 3, participants who did not pass the manipulation check included 3 participants from Group One, four from Group Two, three from Group Three, and six from Group Four. The total number of participants who failed the manipulation check was 16 (20%) out of 80 participants, resulting in 64 (80%) participants who could be processed further.

If the experiment has been run by randomization, no randomization testing is required. However, randomization testing was performed to increase confidence that participants had been randomized between cells. If significant
results are found, the results of this test will be used to estimate which variables or demographic characteristics should be included as covariates. A covariate is an extraneous variable (other than the studied variable) suspected of influencing the experimental results.

Table 4. Gender Randomization Test

<table>
<thead>
<tr>
<th>Value</th>
<th>Df</th>
<th>Asymptotic Significance (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square Squeeze</td>
<td>18.247(^a)</td>
<td>5</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>20.961</td>
<td>5</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.054</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

First, after testing the demographic variable of gender using Chi-square (df= 5; n= 64), it was discovered that there were significant differences between cells (Pearson X2 = 18.247; p (5%) < 0.003). The result suggests that the variables in the form of gender may not have been randomized. As a result, when conducting additional testing with Ancova, this variable will be included as a covariate.

Table 5. GPA Randomization Test

<table>
<thead>
<tr>
<th>Value</th>
<th>Df</th>
<th>Asymptotic Significance (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square Squeeze</td>
<td>155.117(^a)</td>
<td>160</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>117.348</td>
<td>160</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.47</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

Second, using Chi-square (df= 160; n= 64), it was discovered that there were significant differences between cells (Pearson X2 = 155.117; p (5%) > 0.594) for the demographic variable of GPA. The result demonstrates that the GPA variable was randomized. As a result, ANCOVA is not subjected to any additional testing.

Table 6. Experience Randomization Test

<table>
<thead>
<tr>
<th>Value</th>
<th>Df</th>
<th>Asymptotic Significance (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square Squeeze</td>
<td>7.280(^d)</td>
<td>5</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>6.551</td>
<td>5</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, 2022

Third, using Chi-square (df= 5; n= 64), it was discovered that there were significant differences between cells (Pearson X2 = 7.280; p (5%) > 0.201) for the demographic variable Experience. The result means that the Experience variable has already been randomized. As a result, ANCOVA is not subjected to any additional testing.
Fourth, using Chi-square (df= 15; n= 64), it was discovered that there was a significant difference between cells (Pearson X2 = 22.696; p (5%) > 0.091) for the demographic variable Age. The result demonstrates that the Age variable has already been randomized. As a result, ANCOVA is not subjected to any additional testing.

The initial number of participants in this experiment was 80, but the number of people who could proceed to the following process was 64. There were 27 male participants and 37 female participants among the 64 total. The participants’ average age was 20.4 years. Two participants were under 19, 40 were 20-21, and the remaining were 21-22. This experiment included 49 participants with no prior investment experience and up to 15 participants with prior investment experience. Participants in the experiment had taken or were currently enrolled in related courses such as Bank and LKBB, Financial Management I, and Financial Management II. All participants have completed related courses to meet the participation requirements.

Before presenting the results of hypothesis testing, descriptive statistics on the response to investment decisions in each Group and the entire Group will be displayed. Levene’s Test was then performed. This study’s Levene Test results are significant, indicating that the variance between groups is homogeneous. However, this does not preclude Anova testing. Anova testing is still done, but it is done by looking at the numbers generated by the Tamhane or Dunnett T3 tests, which are used when the Levene test results are significant. The findings show that the statistical figures obtained are similar. The table below contains descriptive statistics on each Group’s response to investment decisions.

### Table 8. Investment Decision Response Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Good News</th>
<th>Bad News</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Group 1 (N=20)</td>
<td>mean=4.50 std=1.32</td>
</tr>
<tr>
<td></td>
<td>Group 3 (N=14)</td>
<td>mean=3.71 std=1.59</td>
</tr>
<tr>
<td></td>
<td>N=54 mean=4.18 std=1.43</td>
<td>N=30 mean=3.37 std=1.51</td>
</tr>
</tbody>
</table>

Source: Research Data, 2022
Hypothesis 1 of this study investigates the main effect of financial literacy variables on investment decisions, or whether there are differences in investment decisions between participants with high financial literacy and participants with low financial literacy. The hypothesis test results showed that the financial literacy variables were significant ($F= 10.198$, $p (5%) < 0.002$). According to the table above, the average score of participants’ decisions made with high financial literacy is 4.38, while the average score of participants’ decisions made with low financial literacy is 3.13. The Significance of the hypothesis test results for financial literacy variables demonstrates that the two values differ significantly, indicating that The first hypothesis is supported.

The results showed that financial literacy has a significant influence on investment decisions. The results of this study further strengthen the research conducted by Putri (2021) and Faalih (2020). The results of his research state that financial literacy variables have a significant effect on investment decisions. However, this is different from the research conducted by Yundari & Artati (2021). The results of the study stated that financial literacy did not have a significant effect on investment decisions in private employees.

Incorrect financial decision-making can occur due to low knowledge of finances. Herawati & Dewi (2020) found that a person's interest in making investments is influenced by their financial literacy. This is reinforced by Faalih (2020) who in his research stated that people with low financial literacy are more reluctant to invest, even if they invest usually based on euphoria for a moment. Financial decisions based on planning and knowledge in line will minimize risks in decision making. This indicates that the higher the level of financial literacy, the better the person will be in making investment decisions.

Furthermore, hypothesis 2 of this study investigates the main effect of non-financial information variables on investment decisions, or whether there are differences in investment decisions between participants who are given good news and participants who are given bad news. The hypothesis test results for the non-financial information variable were significant ($F= 3.418$ $p (10%) < 0.069$). According to the table above, the average value of participant decisions given manipulation with the excellent news is 4.18, while the average value of participant decisions with awful news is 3.37. The Significance of the hypothesis test results for non-financial information variables demonstrates that the two values differ significantly, indicating that The second hypothesis is supported.
test results for non-financial information demonstrates that the two values differ significantly, implying that Hypothesis 2 is also true.

Not only the Main Effect financial literacy in this study was supported, the Main effect on Non-Financial Information was also supported. The results of this study further strengthen the research conducted by Dison (2020) and Angraeni & Almilia (2017). The results of his research state that information variables have a role to change a belief, so that decision-making actions can be changed when receiving new information. However, this is different from the research conducted by Septyato & Adhikara (2013) and Yuwono (2020), the results of his research show that the role of accounting information does not have a significant effect on an investor's investment decisions.

According to Septyato & Adhikara (2013) information is a signal that functions as a stimulus. Through the information understanding center, there is a mental investment process in investors. Thus, signal information can be considered good news or bad news. Investor behavior is strongly influenced by the information received because information is individual. That is, individuals in determining investment decisions will be greatly influenced by the non-financial information obtained. The better the non-financial information obtained, the more an individual will be interested in investing in the company and if the non-financial information he obtains is bad news, it will make an individual reluctant to invest and it is likely that investors will also sell their shares.

Figure 2. Financial Literacy Interaction Plot*Non-Financial Information

*Source: Research Data, 2022.

Finally, Hypothesis 3 concerns the interaction effect of financial literacy variables and non-financial information on investment decisions. The hypothesis test results were non-significant (F= 1.167; p (10%) > 0.284). The above image depicts the interaction plot. Because there is no interaction between financial literacy variables and non-financial information, Hypothesis 3 is rejected.

The simple logic is that a person who has sufficient financial literacy is less likely to be able to accept the information received raw, so the absence of interaction in this study is very reasonable. A person who has sufficient financial literacy tends to be careful in determining the investment decisions he will make.
In addition, as explained above, the information needs of an investor vary. There are investors who need information when making investment decisions and there are also investors who tend not to pay attention to this because their financial literacy feels sufficient.

It was discovered that the gender has significant differences between cells, as explained in the Randomization testing section. The gender variables may not have been randomized. As a result, the gender variable will be included as a covariate in the subsequent ANCOVA test to ensure that the dependent variables are only affected by the manipulated independent variables.

**Table 10. Results of the ANCOVA Hypothesis Testing**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>34.834</td>
<td>4</td>
<td>8.708</td>
<td>3.967</td>
<td>0.006</td>
</tr>
<tr>
<td>Intercept</td>
<td>88.682</td>
<td>1</td>
<td>88.682</td>
<td>40.395</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>0.439</td>
<td>0</td>
<td>0.439</td>
<td>0.2</td>
<td>0.656</td>
</tr>
<tr>
<td>X1_Financial Literacy</td>
<td>22.287</td>
<td>1</td>
<td>22.287</td>
<td>10.152</td>
<td>0.002</td>
</tr>
<tr>
<td>X2_Non-Financial Information</td>
<td>7.264</td>
<td>1</td>
<td>7.264</td>
<td>3.309</td>
<td>0.074</td>
</tr>
<tr>
<td>X1_Financial Literacy*X2_Non</td>
<td>2.833</td>
<td>1</td>
<td>2.833</td>
<td>1.29</td>
<td>0.261</td>
</tr>
<tr>
<td>Total</td>
<td>1087</td>
<td>64</td>
<td>2.195</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>164.359</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Research Data, 2022.*

Based on the results of the ANCOVA test, it is known that when gender was included as a covariate variable, the result was insignificant (F= 0.2; p (10%) > 0.656). These findings indicate that gender does not affect the investment decision variables. Gender did not influence the investment decisions tested in this study.

**CONCLUSION**

Based on the above presentation, it can be concluded that testing the main effect of financial literacy variables and non-financial information has each had a significant influence on investment decisions. However, this is different from testing the interaction effect between financial literacy variables and non-financial information simultaneously on investment decisions that did not have a significant enough influence.

The results of research using experimental methods have good internal validity, but external validity cannot be obtained properly so it is necessary to be careful in generalizing research results and typical laboratory experiments with the use of cases and procedures presented in the form of illustrations of simplification of real conditions in the field. Real cases that occur in the field will certainly probably be more complex than the cases made in this experiment. In addition, there is still the possibility of bias caused by technical matters such as the possibility that the physical condition of participants who are tired and want to go home immediately can be biased towards the experimental response given.
REFERENCES


(1st ed.). BPFE.


Nahartyo, E. (2012). Desain Dan Implementasi Riset Eksperimen. UPP STIM YKPN.


Wahyuni, S., & J. H. (2012). Reminder effect and anchoring-adjustment in
