The influence of financial behavior on capital market investment decision making with mediating of financial literacy in Yogyakarta

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A B S T R A C T

The growth of capital market investors and financial literacy has increased every year and investors in making an investment decision However, financial theory argues that there are psychological biases that can influence investors in making inappropriate investment decisions. This study aims to examine the influence and analyze Overconfidence, Loss Aversion and Herding Bias on investment decisions and Financial Literacy as a mediating variable. Financial Literacy is used as mediating variable in the relationship of Overconfidence, Loss Aversion, However Herding Bias variables on Investment Decisions. This study uses non-probability sampling techniques to as many as 163 investors stock in Yogyakarta as respondents. Findings/Results: the study shows that overconfidence, loss aversion and herding bias have a significant effect on investment decisions and overconfidence, loss aversion and herding bias are not mediated by financial literacy in making investment decisions.

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I N T R O D U C T I O N

In the development of the capital market in Indonesia, people in fact still invest little in the capital market with a large population of Indonesia, the data owned by PT Kustodian sentral efek Indonesia (KSEI) shows that it has increased from year to year. For the number of investors in shares and other securities at (KSEI) shows that in 2020 the number of investors was 1,695,268 people who invested and experienced an increase in 2021 by 103.50%, namely 3,451,513 people, and experienced another increase in 2022 by 28.64%, namely 4,439,933 and in 2023 the first quarter has shown an increase of 2.31%, namely 4,542,296 people who became investors.

Based on the development of the number of investors in Indonesia, followed by the development of financial litigation which has increased every year. In a survey conducted by the Financial Services Authority (OJK) with survey data collection conducted directly in the form of face-to-face interviews and using a computer assisted personal interviewing (CAPI) system on 14,634 respondents conducted in 34 provinces in Indonesia showed that in 2013 the level of financial literacy was 21.84% and in 2016 of 29.70% and 2019 experienced an increase of 38.03% and again rose in 2022 by 49.68%. This is certainly caused by the development of information and communication so that people have financial literacy knowledge. In this significant development of investors, investment decision making may be influenced by psychological behavioral factors and not all investors are able to analyze and read company financial reports. This can certainly be influenced by other investors, advice from friends, influencers, and other latest news.

With the development of financial literacy from year to year has increased, but there are several sectors that still experience the growth of financial literacy that is still not developed. The Financial Literacy Level by Financial Services Sector in the financial services authority shows that Indonesians have a very high level of literacy in the banking sector with 49.92%, mortgages 40.75%, and insurance 31.72% in 2022. However, there is a slight decline in the capital market sector from 4.92% to 4.11%, fintech 10.90%, and microfinance institutions 14.44% in 2022.
In line with the Indonesian Stock Exchange (IDX) Yogyakarta representative with the growth of investors in the special area of Yogyakarta has increased from 2022, namely 126,687 investors and in April 2023 to 157,680 investors. This is certainly influenced by things that become a consideration for someone deciding to invest. In deciding to invest, good insight and knowledge are needed to be able to make investment decisions so that there are no losses for investors. According to Ardini & Achyani, (2023) conveying investment decisions is a series of processes where investors, both individuals and companies, decide on an investment decision based on the resources and information they have. In the decision process there is rational and irrational investor behavior.

Based on traditional financial theory introducing the efficient market hypothesis, all investors in making an investment decision are assumed to be people who behave rationally. This is different from financial theory which argues that there are psychological biases that can affect investment decision making Vijaya, (2014). In investment decision making, rational behavior is not always carried out by investors as an assessment that must be made in making investment decisions. There are some investors who do investment planning, but there are investors who do not plan and explore in-depth information for investment decision making. The following things can affect investment decisions such as financial literacy, overconfidence, loss aversion, and herding bias. In Yuwono & Elmadiani’s research, (2021) explains that overconfidence does not have a positive and significant effect on investment decisions. This is also supported in the research of Afriani et al., (2019) which explains that overconfidence on investment decisions has no positive and significant effect.

For overconfidence, there are different findings in the research of Seraj et al., (2022) explaining that overconfidence behavior in making investment decisions has a significant influence. In line with the research of Aini & Lutfi, (2019) which also explains that there is a significant influence of overconfidence on investment decisions. Overconfidence behavior is an action that can influence an investor in making investment decisions because this behavior tends to be excessive in judgment or underestimate the information in the public and can result in biased behavior.

Of these various behaviors, there is loss aversion behavior that also influences investment decisions. The results conducted by Ardini & Achyani, (2023) explain that loss aversion research does not have a positive and significant influence on making investment decisions, and in the research of Aini & Lutfi, (2019) concluded that loss aversion has no positive and significant effect on investment decision making. Loss aversion behavior can affect investor behavior in making investment decisions. There are different results in the research of Jain et al., (2020) and Bertella et al., (2020) showing that there is a positive & significant effect of loss aversion in making investment decisions, in line with what Yasmin & Ferdaous, (2023) and Adil et al., (2022) stated that there is an effect of loss aversion on investment decisions positively and significantly.

In other financial behavior, namely herding bias, research conducted to test herding bias, which has a significant influence in making investment decisions Kartini & Nahda, (2021) Herding bias research was also tested in Areiqat et al. research, (2019) by stating that there is a positive & significant influence of herding bias in making investment decisions. As well as other studies have different results from research by Adil et al., (2022) showing that there is no significant influence of herding bias on investment decisions. The same results are also shown by Fitriyani & Anwar, (2022) and Ardini & Achyani, (2023) which explain that herding bias has no positive influence on investment decisions.

In addition, the mediating variable of financial literacy is the most important aspect to determine the extent to which investors are influenced and avoid irrational behavior in making investment decisions. According to Khan et al., (2023) financial literacy has an important role in a strong understanding of finance that can reduce biased behavior in investment choices and increase the efficiency of financial knowledge. In the results of Iram et al.’s research, (2023) involved financial literacy as a link to determine the impact of the influence of biased behavior in making investment decisions and found that financial literacy can mediate the relationship between the influence of overconfidence, loss aversion and herding bias in making investment decisions.

With the increasing growth of investors in Indonesia and also in the special region of Yogyakarta and accompanied by an increase in the growth of financial literacy that increases every year and the differences in the results of various studies that have been listed, researchers are interested in conducting this research.

Literature Review

Investment

According to (Subash & Bā’ā, 2012) states that investment decisions can be defined as a process of choosing alternatives from various alternatives. In line with what was conveyed by Bodie, at el (2014), namely investment in the form of a current commitment to money or other resources in the hope of getting future profits. In making investment decisions, an investor has a subjective nature that depends on the investor's financial condition. Technical analysis capabilities and investor perceptions of risk.

Behavior Financial Theory

According to Vijaya, (2014) states that behavior finance has a close relationship in combining individual behavior, market phenomena, and using knowledge drawn from both the fields of psychology and financial theory. In line with what was conveyed by Sisbintari, (2017) stated that behavior finance is studying how humans actually behave in a financial determination, especially studying how psychology affects financial decisions. And according to Saeedi & Hamedi, (2018) states that behavioral finance is
part of financial market predictions that focus on the combination of the two disciplines of psychology and economics as a development in investment decisions.

**Overconfidence**

According to Ardini & Achyani, (2023) states that Overconfidence is a condition of emotional deviation owned by a person due to believing that he is trained and has sufficient knowledge about a decision this does not match what an investor has who overestimates his ability to invest. Salvatore & Esra, (2020) said that investors who have an Overconfidence attitude tend to behave in an underestimate assessment of publicly available information and make a decision that is desperate to believe in their own judgment or assumptions, resulting in bias towards investment decisions.

**Loss Aversion**

According to (Kleinübing et al., 2005) explains that loss aversion behavior manifests the attitude of investors where the pain felt due to the losses experienced is greater than the gain as a pleasure obtained. This makes investor behavior to focus on feelings to avoid losses rather than feelings of profit. According to Areiqat et al., (2019) states that loss aversion is a condition where the investor's dominant feeling is avoiding losses rather than investing profits.

**Herding Bias**

According to Setiawan et al., (2018) states that ordinary herding occurs when investors put aside personal beliefs and believe more in the beliefs of other investors without thinking at length. Meanwhile, according to Areiqat et al. (2019) states that ordinary herding behavior also occurs when the information obtained is more influenced by public decision information or other group and personal decisions in making investment decisions. According to Virigineni & Rao, (2014) said that ordinary herding has a clear intention of ignoring personal information and imitating the behavior of other investors which leads them to trade in the same direction as other investors, this is the cause of the movement in and out of investors.

**Investment Decision**

According to Ardini & Achyani, (2023) states that investment decisions are a series of processes in which an investor, in the form of an individual or company, collects or makes investment decisions based on resources including capital and information owned. This is supported by Budiarto & Susanti, (2017) which states that investment decisions are choices in depositing money into an asset to generate future profits.

**Financial Literacy**

According to Al-Tamimi & Kalli, (2009) states that financial literacy refers to the ability of individuals who have the skills and knowledge to assess who manage financial resources efficiently in the long term and have financial health goals. According to Lusardi, (2019) financial literacy has a strong relationship with a person's ability to cope with financial management that has an impact on spending.

![Theoretical Framework](image)

**Figure 1: Theoretical Framework**

The hypotheses of this study are:

H1: There is a positive influence of overconfidence (X1) on investment decision making (Y) in the capital market.
H2: There is a positive effect of loss aversion (X2) on investment decision making (Y) in the capital market.
H3: There is a positive influence of herding bias (X3) on investment decision making (Y) in the capital market.
H4: The effect of financial literacy (Z) mediates the effect of overconfidence (X1) on investment decisions (Y) in the capital market.
H5: The effect of financial literacy (Z) mediates the effect of loss aversion (X2) on investment decisions (Y) in the capital market.
H6: The influence of financial literacy (Z) mediates the influence of herding bias (X3) on investment decisions (Y) in the capital market.
Research & Methodology

Processing of this research data, using SmartPLS Version 4.0 software with the following stages of analysis:

Outer Model

Validity Test

Convergent Validity

Convergent Validity is done by measuring the loading factor for each indicator and using the average variance extracted (AVE) method. Indicators can be declared valid if the loading factor is above 0.7 while the AVE value is above 0.5.

Discriminant Validity

Discriminant validity is carried out by measuring the value of cross loadings for each indicator and the Fornell-Larcker criteria where the AVE square root value criterion is greater than the correlation between constructs. Meanwhile, cross loadings are assessed from reconstruction indicators which are measured greater than the loading of other constructs.

Reliability Test

In this assessment, the reliability test is carried out based on the composite reliability formula and Cronbach's alpha. with variable indicators said to be reliable if the composite reliability value and Cronbach's alpha > 0.7 and not reliable if the composite reliability value and Cronbach's alpha < 0.7.

Collinearity Test

The collinearity test is used to determine the correlation of independent variables with other independent variables. The criteria used in the collinearity test is the VIF value < 3.5-5.

Inner Model

Coefficient of Determination (R2)

The coefficient of determination has the aim of measuring the ability of the independent variable to explain the dependent variable. In the coefficient of determination between zero and one so that the higher the value, the independent variable has a high ability to explain variations in changes to the dependent variable. The R-Square value can measure with a value, namely, if it is above 0.75, it has a strong influence, while 0.50-0.74 has a moderate influence and 0.25-0.49 has a weak influence.

Effect size (F square)

The Effect size (F square) test has the aim of knowing the goodness of the model. The interpretation of the F square value is that 0.15 has a small effect, 0.20 has a moderate effect and 0.35 has a strong effect at the structural level.

Hypothesis Test and Moderation Analysis

Hypothesis testing is done to test the truth of a statement. By looking at the Path Coefficient value to test the influence and moderation used to determine the relationship between variables. In the test can be assessed using the "Bootstrapping" procedure, in the Hypothesis test, the decision is rejected or rejected by looking at the t-statistic and P-value. If the t-statistic > 1.96 and P-value < 0.05, the hypothesis is accepted, while if the t-statistic < 1.96 and P-value > 0.05 is rejected.

Results and Discussion

Outer Model

The results of the outer loading figure above show that the research variables in the form of Overconfidence, Loss Aversion, Herding Bias, Financial Literacy and Investment Decisions on questions that represent each statement have a loading factor value > 0.6, so it can be stated that these questions have represented each variable to meet the research requirements.
Validity Test

Convergent Validity

The convergent validity test is carried out to measure the validity of the various indicators with their variables.

Table 1: Average variance extracted (AVE)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average variance extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>0.721</td>
</tr>
<tr>
<td>Herding Bias</td>
<td>0.789</td>
</tr>
<tr>
<td>Investment decisions</td>
<td>0.768</td>
</tr>
<tr>
<td>Loss Aversion</td>
<td>0.805</td>
</tr>
<tr>
<td>Overconfidence</td>
<td>0.715</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

Based on the table above, it explains that the AVE value of the Financial Literacy variable > 0.05 or 0.724, the Herding Bias variable > 0.05 or 0.789, Investment Decision > 0.05 or 0.768, Loss Aversion > 0.05 or 0.805 and Overconfidence > 0.05 or 0.715. This shows that each variable has good Discriminant validity.

Discriminant Validity

According to Hair et al (2017), it shows the parameters for testing discriminant validity by looking at the results of Heterotrait-monotrait (HTMT) where a data can be said to be valid if the data measurement must be smaller than 0.85 or less than 0.90. The following is the HTMT of the results of this study:

Table 2: Heterotrait-monotrait ratio (HTMT)

<table>
<thead>
<tr>
<th>Heterotrait-monotrait ratio (HTMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herding Bias &lt;-&gt; Financial Literacy</td>
</tr>
<tr>
<td>Investment decisions &lt;-&gt; Financial Literacy</td>
</tr>
<tr>
<td>Investment decisions &lt;-&gt; Herding Bias</td>
</tr>
<tr>
<td>Loss Aversion &lt;-&gt; Financial Literacy</td>
</tr>
<tr>
<td>Loss Aversion &lt;-&gt; Herding Bias</td>
</tr>
<tr>
<td>Loss Aversion &lt;-&gt; Investment decisions</td>
</tr>
<tr>
<td>Overconfidence &lt;-&gt; Financial Literacy</td>
</tr>
<tr>
<td>Overconfidence &lt;-&gt; Herding Bias</td>
</tr>
<tr>
<td>Overconfidence &lt;-&gt; Investment decisions</td>
</tr>
<tr>
<td>Overconfidence &lt;-&gt; Loss Aversion</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

Based on table 2, the HTMT value of each variable is below 0.85. Indicates that all variables can be said to be valid.
Reliability Test

Composite Reliability and Cronbach's alpha are the parts used to test the reliability value of variable indicators, a variable can be said to be reliable if the Composite Reliability value is > 0.7 and Cronbach's alpha > 0.7. The following is a presentation of the table below:

Table 3: Composite Reliability dan Cronbach's alpha

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's alpha</th>
<th>Composite reliability (rho_c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>0.877</td>
<td>0.913</td>
</tr>
<tr>
<td>Herding Bias</td>
<td>0.911</td>
<td>0.937</td>
</tr>
<tr>
<td>Investment decisions</td>
<td>0.940</td>
<td>0.952</td>
</tr>
<tr>
<td>Loss Aversion</td>
<td>0.920</td>
<td>0.943</td>
</tr>
<tr>
<td>Overconfidence</td>
<td>0.900</td>
<td>0.926</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

The table above shows that the Composite Reliability value is generated on the Overconfidence variable > 0.7 or 0.926, Loss Aversion > 0.7 or 0.942, Herding Bias > 0.7 or 0.937, Financial Literacy > 0.7 or 0.913 and Investment Decision > 0.7 or 0.952. This is each variable > 0.7 determines the variable is reliable. For the measurement of the Cronbach's alpha value generated on the Overconfidence variable > 0.7 or 0.900, Loss Aversion > 0.7 or 0.920, Herding Bias > 0.7 or 0.911, Financial Literacy > 0.7 or 0.877 and Investment Decision > 0.7 or 0.940 also shows each variable > 0.7 so that it can be said that the variable is reliable.

Collinearity Test

The collinearity test is used to determine the correlation of independent variables with other independent variables. The criteria used in the collinearity test is the VIF value < 3.5-5. The following table shows the results of the collinearity test:

Table 4: Collinearity Statistics (VIF)

<table>
<thead>
<tr>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy -&gt; Investment decisions</td>
</tr>
<tr>
<td>Herding Bias -&gt; Financial Literacy</td>
</tr>
<tr>
<td>Herding Bias -&gt; Investment decisions</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Financial Literacy</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Investment decisions</td>
</tr>
<tr>
<td>Overconfidence -&gt; Financial Literacy</td>
</tr>
<tr>
<td>Overconfidence -&gt; Investment decisions</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

Based on table 4 Collinearity Statistics (VIF) output is found to be used in knowing the collinearity test on the output of Financial Literacy on Investment Decisions of 1.041, Herding Bias on Financial Literacy of 1.025, Herding Bias on Investment Decisions of 1.033, Loss Aversion on Financial Literacy of 1.028, Loss Aversion on Investment Decisions of 1.037, Overconfidence on Financial Literacy of 1.006 and Overconfidence on Investment Decisions of 1.026, this, shows that each variable has a VIF value <3.3-5 with this it can be concluded that collinearity does not apply.

Inner Model

Coefficient of Determination (R2)

The determination test has the aim of knowing the effect of the independent variable on the dependent variable. In this test, the greater the R2 value, the stronger the effect of the independent variable on the dependent variable.

Table 5: Hasi R Square

<table>
<thead>
<tr>
<th>R-square</th>
<th>R-square adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>0.039</td>
</tr>
<tr>
<td>Investment Discussion</td>
<td>0.864</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

The result of R square Financial Literacy has a value of 0.039 indicating that the influence of Overconfidence, Loss Aversion, Herding Bias on Financial Literacy has a weak influence because it is at 0.25-0.49. While the Investment Decision has a strong influence where the R square result has a value of 0.864 indicating that the influence of Overconfidence, Loss Aversion, and Herding Bias on Investment Decisions has a strong influence because it is above 0.75.
Effect size (F square)

The Effect size (F square) test has the aim of knowing the goodness of the model. The interpretation of the F square value is that 0.15 has a small effect, 0.20 has a moderate effect and 0.35 has a strong effect at the structural level.

### Table 6: F square results

<table>
<thead>
<tr>
<th>Path</th>
<th>F-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy -&gt; Investment decisions</td>
<td>0.232</td>
</tr>
<tr>
<td>Herding Bias -&gt; Financial Literacy</td>
<td>0.008</td>
</tr>
<tr>
<td>Herding Bias -&gt; Investment decisions</td>
<td>0.912</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Financial Literacy</td>
<td>0.009</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Investment decisions</td>
<td>1.068</td>
</tr>
<tr>
<td>Overconfidence -&gt; Financial Literacy</td>
<td>0.019</td>
</tr>
<tr>
<td>Overconfidence -&gt; Investment decisions</td>
<td>3.842</td>
</tr>
</tbody>
</table>

**Source:** Primary Data 2023

for the F square value which has a small impact is below 0.15, namely Herding Bias on Financial Literacy, namely 0.008, Loss Aversion on Financial Literacy, namely 0.009, Overconfidence on Financial Literacy, namely 0.019. Meanwhile, for those that have a moderate impact, namely Financial Literacy on Investment Decisions, namely 0.232 above 0.20 and those that have a strong impact above 0.35 are Herding Bias on Investment Decisions, namely 0.912, Loss Aversion on Investment Decisions, namely 1.068 and Overconfidence on Investment Decisions, namely 3.842.

**Path Analysis (Path Coefficient)**

Hypotheses are tested to determine the influence between variables. Hypothesis testing is carried out using the bootstrapping method in smartPLS to determine the decision to accept or reject a hypothesis based on the significant value of the P-value and the statistical T value. The accepted hypothesis has a positive value parameter at a P-value of less than 0.05 and a statistical T value of more than 1.96 with a 5% significant level. While the value at P-value is less than 0.05 and the statistical T value is less than 1.96 with a 5% significant level, it can be said that the relationship between variables is not significant or the hypothesis is rejected.

### Figure 3: Inner Model

Figure III explains the strength of the assessment of each latent variable. For structural model analysis will be used to see the results of Path Coefficient Direct and Path Coefficient Indirect which is done using bootstrapping.

### Table 7: Path Coefficient Results Direct

<table>
<thead>
<tr>
<th>Path</th>
<th>Original sample (O)</th>
<th>T statistics</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overconfidence -&gt; Investment decisions</td>
<td>0.731</td>
<td>13.852</td>
<td>0.000</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Investment decisions</td>
<td>0.388</td>
<td>8.344</td>
<td>0.000</td>
</tr>
<tr>
<td>Herding Bias -&gt; Investment decisions</td>
<td>0.358</td>
<td>7.891</td>
<td>0.000</td>
</tr>
<tr>
<td>Financial Literacy -&gt; Investment decisions</td>
<td>0.181</td>
<td>4.127</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Source:** Primary Data 2023
Based on the Path Coefficient Results Direct table, the P-value and statistical T-value on Overconfidence on Investment Decision are 13.852 (> 1.96) and 0.000 (< 0.05). This H1 is accepted, indicating that Overconfidence on Investment Decisions has a positive and significant influence. The P-value and T-statistic value on Loss Aversion on Investment Decision are 8.344 (> 1.96) and 0.000 (< 0.05). This H2 is accepted, indicating that Loss Aversion on Investment Decisions has a positive and significant effect and the P-value and statistical T-value on Herding Bias on Investment Decisions are 7.891 (> 1.96) and 0.000 (< 0.05). This H3 is accepted, indicating that Herding Bias on Investment Decisions has a positive and significant effect.

**Table 8: Path Coefficient Results Indirect**

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>Original sample (O)</th>
<th>T statistics</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overconfidence -&gt; Financial Literacy -&gt; Investment decisions</td>
<td>-0.025</td>
<td>1.680</td>
<td>0.093</td>
</tr>
<tr>
<td>Herding Bias -&gt; Financial Literacy -&gt; Investment decisions</td>
<td>0.016</td>
<td>0.845</td>
<td>0.398</td>
</tr>
<tr>
<td>Loss Aversion -&gt; Financial Literacy -&gt; Investment decisions</td>
<td>0.017</td>
<td>0.858</td>
<td>0.391</td>
</tr>
</tbody>
</table>

**Source:** Primary Data 2023

Based on the Indirect Path Coefficient Results table, the P-value and T statistical value on Overconfidence on Investment Decisions with Financial Literacy mediation are 1.680 (> 1.96) and 0.093 (<0.05). This H4 is rejected which indicates that Overconfidence on Investment Decisions cannot be mediated by Financial Literacy. P-value and T statistical value on Loss Aversion on Investment Decisions with Financial Literacy mediation of 0.845 (<1.96) and 0.398 (>0.05). This H5 is rejected which indicates that Loss Aversion on Investment Decisions cannot be mediated by Financial Literacy and the P-value and T statistical value of Herding Bias on Investment Decisions with Financial Literacy mediation of 0.858 (< 1.96) and 0.391 (> 0.05). This H6 is rejected which indicates that Herding Bias on Investment Decisions cannot be mediated by Financial Literacy.

**Discussions**

Based on the hypothesis test output obtained from the Path Coefficient shown in table 7, it can be assessed that overconfidence has a positive and significant influence on investment decisions on investors. This shows that investment decisions made by investors can be influenced by the attitude of excessive self-confidence or overconfidence behavior. An investor who has higher overconfidence behavior. In Bouteska & Regaieg's research, (2020) shows that overconfidence has a positive and significant impact on investment decisions in companies in the US. In line with Aljughaiman & Chebbi's research, (2022) explains that overconfidence contributes to investment decision making by investors so that investors show that they are influenced by overconfidence.

that loss aversion behavior on investment decisions has a positive and significant influence on an investor. The loss aversion variable illustrates that the higher the loss aversion can increase the influence for investors in making investment decisions. Jain et al., (2020) show that loss aversion has a positive and significant effect on investment decisions, this is an investor must observe losses that can result in investors not having the opportunity to make profits from the losses obtained. Bertella et al. (2020) explain that loss aversion also affects investors to make investment decisions.

In the hypothesis test for the research has been carried out which is illustrated to have an output that shows that herding bias attitude has a positive and significant effect on investment decision making by an investor. Yasmin & Ferdaous, (2023) show that herding bias has a positive impact on investment decision making made from Pakistani investor research and Kartini & Nahda's research, (2021) describes the existence of herding bias behavior has a positive and significant influence in producing investment decisions made by an investor.

In the results of financial literacy mediation, it can be concluded that financial literacy cannot mediate overconfidence on investment decisions in the capital market, which means it has no positive effect. In the implications of its use in understanding that increasing financial literacy alone is not enough to overcome the impact of overconfidence on investment decision making so it is necessary to consider a more holistic approach. Based on the research of Ranaweera & Kawshala, (2022) explains that the results related to the financial literacy war on overconfidence on investment decisions do not have a positive influence, which means that it does not have a role in mediating the behavior of overconfidence on investment decisions. In line with the research of Hildebrandus et al., (2023) shows that the impact of financial literacy on overconfidence on investment decisions has no positive influence on the relationship between overconfidence and investment decisions.

For the results of hypothesis testing which proves that there is no effect of financial literacy that can provide a mediating effect on the relationship between loss aversion and investment decisions or does not have a positive and significant effect. Hariono et al.’s research (2023) found different things, namely the effect of the impact of financial literacy on the relationship between loss aversion behavior and investment decisions. This states that an investor who has a very exhilarating behavior when he gets a profit in investment and suffers greatly when he experiences a loss so that in making irrational investment decisions, it cannot adequately overcome the impact on investment decisions by only having an understanding of financial literacy.
Furthermore, financial literacy does not mediate herding bias on investment decisions or it can be stated that it does not have a positive and significant effect on involvement in the behavioral relationship. With this, according to the results of Ranaweera & Kawshala, (2022) explaining that herding bias on investment decisions has no influence by involving financial literacy so that financial literacy cannot have an impact on the relationship of herding bias on investment decisions. In research by Adil et al., (2022) shows that financial literacy is statistically male investors are not positive and significant in impacting herding bias on investment decisions. Hildebrandus et al., (2023) also explained that financial literacy cannot have an impact on the relationship of herding bias on investment decisions.

Conclusions

This study found that overconfidence, loss aversion and herding bias affect investment decisions. This shows that capital market investors in making investment decisions under capital market uncertainty make an investor have overconfidence behavior which has an impact on the influence in making an investment decision. So that overconfidence behavior is something that must be considered in making investment decisions with confidence based on fundamental knowledge in investing that will be done so as to avoid biased behavior.

Loss aversion testing shows that loss aversion behavior has an influence on investment decisions in an investor. This indicates that loss aversion behavior or a form of avoiding losses rather than gaining profits must face a market that has no uncertainty, capital market investors tend to avoid investments that allow losses to occur. The form of caution in avoiding losses made by investors makes investment decisions made biased and irrational. So it is necessary to deepen the analysis in making decisions so that there are no losses in investing. As herding bias has results that show that herding bias behavior has an influence on investment decisions made by an investor, it is necessary for investors to learn more about how to make investment decisions so that they do not behave biased and irrational.

Investors who have overconfidence, loss aversion and herding bias behavior can regulate behavior to avoid losses in making investment decisions in the capital market and the practical implications for financial management, investors can deepen a more careful risk management approach because overconfidence, loss aversion and herding bias have a positive impact on investment decisions in the capital market.

The involvement of financial literacy in mediating the relationship between investors who have overconfidence, loss aversion and herding bias behavior in investment decision making cannot mediate the relationship.

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References


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