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**The Effect of Financial Literacy, Herding Behavior and Overconfidence on
Investment Decisions of Stock Investors in Jabodetabek**

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Abstract: *The phenomenon of stocks from companies with good fundamentals is less attractive to investors. Conversely, stocks of companies with less good fundamentals are more attractive to investors. Investors have various factors that can influence their investment decision on stocks. This study measures the effect of financial literacy, herding behavior dan oveconfidence on the investment decision of stock investors in the Jabodetabek Area. Stoock investors who are domiciled in the Jabodetabek area and have had a single investor identification (SID) for at least 1 year, are the object of this study. With an unknown population size and the samples are 120 investor respondents. Through the results of multiple regression analysis, the results show that financial literacy, herding behavior and overconfidence have a positive and significant effect on investment decisions.*

Keywords : *Financial Literacy, Herding Behavior, Investment Decision, Overconfidence*

Background

The Covid-19 virus was officially announced by the government as entering Indonesia on March 2 2020 and causing economic growth to experience pressure of up to -5.32% in the third quarter of 2020 (news.okezone.com, 2020). On the other hand, Covid 19 has changed the way people view the importance of financial management. The corona virus pandemic has increased public awareness about how to handle finances, one of which is increasing awareness to start investing (Sindonews.com, 2020). According to the (Indonesian Stock Exchange (IDX), 2020), the number of capital market stock investors in the Greater Jakarta area was recorded at 887,000 investors as of August 2021. This number has increased compared



to July, which reached 855,225 investors. With the increasing number of investors and the increasing transaction value on the capital market, it can be concluded that investment in shares is experiencing growth, even during the pandemic. This is also in line with the growth of Single Investor Identification (SID) in the Jakarta, Bogor, Depok, Tangerang and Bekasi (Jabodetabek) area as shown in Figure 1.

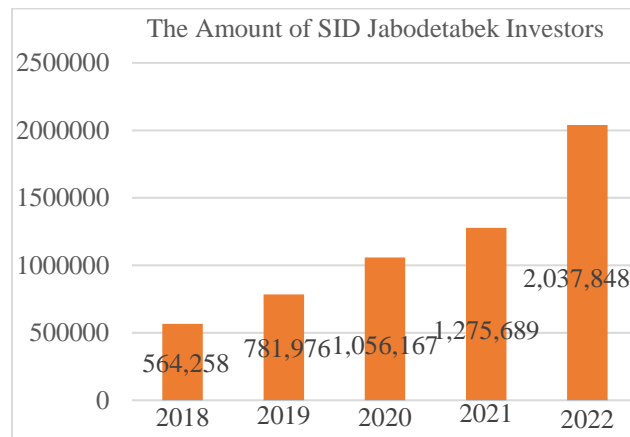


Figure.1 Number of Jabodetabek SID Investors 2018-2022
Source: maintained by the author, 2023

The largest increase in the number of investors was recorded in 2022, namely 762,159 investors from the previous year. The increasing number of investors shows greater interest in investing and expects these funds to grow both in the short, medium and long term. On the other hand, these expectations are not in accordance with their investment knowledge. This is reflected in the 2022 National Financial Literacy and Inclusion Survey (Financial Services Authority, 2022) of the growth in the level of financial literacy based on the capital market sector, which was the lowest among the eight other sectors in the last six years, namely 0.29 .

The increasing number of investors and the low level of investor knowledge has resulted in various institutions holding various seminars or educational classes. The material taught in seminar or educational classes is usually in the form of fundamental and technical analysis. Both are the most frequently used analyzes when analyzing stocks. The existence of technology makes it easier for investors to receive easily accessible analytical recommendations, both through social media, television, websites, print media (Melo & Wanyama, 2011) and trading applications. Investors tend to rely more on analyst recommendations, rather than the results of their own analysis (Nofsinger & Sias, 1999). As a result, investors tend to make illogical decisions, based on wrong information (Gupta, 2019).

Investors' illogical decisions occurred on the Indonesian capital market exchange throughout 2020. One of them was the JCI correction in March 2020 which was the biggest correction in the last 18 years (Andriani, 2020). . This happened as a result of investors panicking, no longer being rational and



emotional, so that they followed the behavior of other investors who were also busy selling their shares (Investor.id, 2020).

Investors' irrational behavior is seen in the phenomenon where stocks with good fundamentals become less attractive to investors. According to the analysis of PT. Philip Sekuritas (Market.bisnis.com, 2020) the majority of shares which have strengthened significantly are dominated by small capitalization companies. On the other hand, the stock prices of issuers that are fundamentally good have actually decreased (cnbnindonesia.com, 2021). This makes the top JCI gainers for the 2020 current period filled with stocks with small market capitalization (Market.bisnis.com, 2020). Where stocks with a capitalization of below IDR 5 trillion are being hunted by domestic investors (Cnbnindonesia.com, 2020).

A study of financial literacy conducted by (Carolynne & Richard, 2000), concluded that financial literacy is directly proportional to relevant information for someone to make the right decision. On the other hand, decisions based solely on irrational considerations also produce irrational results. This event is known as financial behavior. One of the behavioral biases is herding behavior, which is a psychological concept often used in the financial world to explain investor scenarios, whether they follow the decisions of others fairly or not (Lao & Singh, 2011). In addition, another bias in behavioral finance is overconfidence. a state where investors feel overconfident, feel competent, and are optimistic about the future (Salwah, 2020).

Based on the phenomenon of irrational capital market investors and the explanation above, researchers are interested in examining investor behavior related to investment decisions. In this study, researchers used three variables that influence investment decisions, namely: financial literacy, herding behavior, and overconfidence. These variables will be described in the next chapter. This study examines the effect of financial literacy, herding behavior, and overconfidence on investment decision variables. Based on the background of the problems above, researchers are interested in conducting research with the title Factors Influencing Investment Decisions of Stock Investors in Jabodetabek

THEORETICAL FRAMEWORK

Signal Theory

In the book *Portfolio Theory and the Indonesian Capital Market* by (Handini, 2020) states that, signal theory is a theory that discusses the rise and fall of market prices, then influences investor decisions. Furthermore, through the book (*Financial Management*, 2001), this theory argues that management in a company provides instructions to outsiders (owners of capital / investors), about how they see the prospects of the company. Assuming that, the information received by each party is different.

Efficient Market Hypothesis



In the book *Investment Management* by Frank J. (Fabozzi, 1999) translated by the Salemba Team, the four efficient market hypotheses state that, the stock prices formed reflect all available information. In the book *Financial Research Empirical Tests*, Karya (Said Kelana Asnawi, 2005). The Efficient Market Hypothesis states that individuals can reasonably think and not use psychological factors in making decisions, so stock prices reflect all available information.

Investation decision

Budiarto and Susanti (Budiarto & Susanti, 2017) say that an Investment decision is a policy taken to make a decision, when an individual faces more than one investment opportunity to anticipate future rewards and profits, before the capital is invested.

Financial Literacy

According to the Financial Services Authority regulation no. 76 of 2016, financial literacy is knowledge, skills and beliefs that influence one's attitudes and behavior to improve the quality of decision making and financial management to achieve prosperity.

Herding Behavior

Herding behavior is a collection of interactions between two or more types of individuals, where investors have a tendency to follow the decisions of other investors. According to Devenow & Welch 1996 in (Harsalim, 2015) defines herding behavior as a pattern of behavior that creates relationships between individuals.

overconfidence

Overconfidence is a condition of believing that an investor has better skills than other investors (Khan et al., 2016). The meaning of "overconfidence" is believed to be that the information held by investors is more accurate than it really is and that the experience gained creates an overconfidence bias

The framework of thought in this research model is depicted in Figure 2 as follows

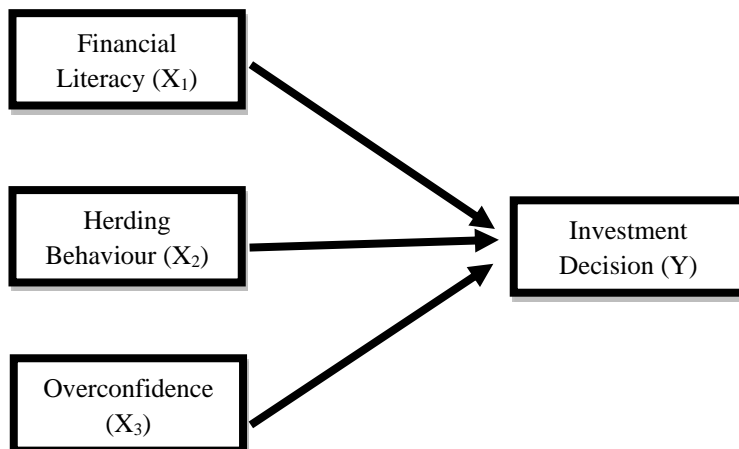




Figure 2. Thinking Framework

Source: Processed by researchers 2023

METHOD

This study uses primary data types and quantitative survey methods. Quantitative research is empirical research where the data used is in the form of numbers (Sugiyono, 2007). Data obtained through a questionnaire that has been adapted to each variable. Questionnaires were distributed via google form to respondents. The Likert scale is used to support researchers in obtaining data. The population in this study cannot be known with certainty so that, it was found that 120 samples were obtained using the Lemeshow formula. Sampling method through purposive sampling. It is a type of non-probability sampling, in which members of the target population meet certain criteria, such as: ease of access, geographical proximity, availability at the time or participation in research (Dornyei, 2007). With the following criteria: 1) Having a minimum 1 year SID, 2) Domiciled in the Greater Jakarta area. Data is processed using the IBM SPSS Statistics 25 application with multiple linear regression testing techniques.

RESULT

Characteristics of respondents

Respondents in this study were stock investors who live in the Jabodetabek area divided into men and women, with an age range of 17 years to > 50 years with various educational and occupational backgrounds (Table 1)

Table 1. The Characteristic of Respondents

Information	Amount	%	Information	Amount	%
District			<i>Frontend Developer</i>	1	0.8
Jakarta	25	20.83	<i>General administrasi</i>	1	0.8
Bogor	24	20	House wife	3	2.5
Depok	24	20	Employee	26	21.7
Tangerang	23	19.17	Content Creator	3	2.5
Bekasi	24	20	Pegawai Negeri Sipil	3	2.5
Education Background			Srudent	18	15.0
High School	31	25.83	Social Media Specialist	5	4.2
Bachelor	82	68.33	Staff teknisi	1	0.8
Graduated School	7	5.83	Health Worker	2	1.7
Occupation			Educational worker	12	10.0
Accounting and Finance	9	7.5	Entrepreneur	13	10.8
<i>Analyst IT</i>	1	0.8			
Business Development	2	1.7			
<i>Data Entry</i>	3	2.5			
<i>Freelance</i>	17	14.2			



Sumber Source: Processed by researchers (2023)

Validity and Reability Test Result

No	r hitung	Cronbach's Alpha
<i>Literasi Keuangan</i>		
1	0.494	0.771
2	0.479	
3	0.499	
4	0.449	
5	0.448	
6	0.474	
7	0.462	
8	0.601	
9	0.527	
10	0.438	
<i>Herding Behavior</i>		
1	0.497	0.675
2	0.440	
3	0.547	
4	0.508	
5	0.507	
<i>Overconfidence</i>		
1	0.684	0.829
2	0.508	
3	0.576	
4	0.688	
5	0.659	
6	0.543	
7	0.710	
<i>Keputusan Investasi</i>		
1	0.489	0.729
2	0.495	
3	0.468	
4	0.504	
5	0.459	
6	0.566	
7	0.619	

Normality Test Results

Validity test through the histogram shows that the data has a normal distribution. As for the statistical test by the Kolmogorov Smirnov method, the value of sig. 2 tailed is obtained at 0.65. This indicates that $0.65 > 0.05$ significance value. so it can be concluded that the data is normally distributed.

Multicollinearity Test Results

In this test using the Variance Inflation Factor (VIF) method is used to see whether or not there is a high correlation. Based on this test, it was found that financial literacy variables had VIF and tolerance values of 1.362 and 0.734. Herding behavior has VIF and tolerance values of 1.487 and 0.672. the overconfidence variable has VIF and tolerance values of 1.402 and 0.713. Where the three have a VIF value < 10 and a tolerance value > 0.1 , it is concluded that there is no multicollinearity.



Keterohedastisitas Test Results

This test aims to see whether in the regression model there is an imbalance of residual variation from case to case. In this test the white method is used. With this test the value of sig. Financial Literacy is 0.939, Herding Behavior has a sig value. 0.910 and Overconfidence has a sig value. 0.655. As for the value of sig. X1 squared is 0.630, X2 squared is 0.347 and X3 squared is 0.225. Then the sig. multiplication of X1 with X2 is 0.810, sig. the multiplication of X1 with X3 is 0.774 and the sig. the multiplication of X2 by X3 is 0.574. All sig. this is greater than 0.05, so it can be concluded that there is no heteroscedasticity through the White test.

Multiple Regression Test Results

Multiple linear regression tests were carried out through the SPSS version 25 application. The results are as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$
$$Y = 7,939 + 0,132X_1 + 0,402 X_2 + 0,205X_3 + e$$

Partial Test Results

Based on the results of the partial significance test (T-test) above, it can be concluded as follows:

- 1) financial literacy has a t count value of 2.317 > t table of 1.981 and has a sig value. of 0.022 < 0.05. it can be concluded that the hypothesis is accepted, that financial literacy has a positive and significant effect on financial literacy
- 2) Herding Behavior has a calculated t value of 3.879 > t table of 1.981 and has a sig value. of 0.000 < 0.05. it can be concluded that the hypothesis is accepted, that Herding Behavior has a positive and significant effect on financial literacy
- 3) Overconfidence has a calculated t value of 3.390 > t table of 1.981 and has a sig value. of 0.000 < 0.05. So it can be concluded that the hypothesis is accepted, that Overconfidence has a positive and significant effect on financial literacy

Simultaneous Test Results

According to the results of this test, the sig. of 0.000 < 0.05 and the f table value is obtained for the calculated f value of 28.529 > 2,683 f table values. So it can be concluded that financial literacy, herding behavior, and overconfidence simultaneously influence investment decisions.

Determination Coefficient Test Results

According to the results of this test, it was found that the value of Adjusted R Square for financial literacy, herding behavior, and overconfidence in investment decisions was 0.410 or equal to 41%. it can be concluded that in this model, the three variables, namely financial literacy, herding behavior, and overconfidence, are able to explain investment decisions by 41%. The remaining 59% can be explained by other variables not examined

DISCUSSION



Based on the results of data collection, data processing and testing carried out, related to Financial Literacy, herding behavior, overconfidence and investment decisions, several conclusions can be drawn, namely:

1. Financial literacy has a positive and significant influence on investment decisions. This is based on the calculated t value of $2.317 > t$ table of 1.981
2. Herding behavior has a positive and significant influence on investment decisions. This is based on the calculated t value of $3.879 > t$ table of 1.981.
3. Overconfidence has a positive and significant effect on investment decisions. This is based on the calculated t value of $3.390 > t$ table of 1.981.

CONCLUSION

Based on the results of this study, the following are some of the implications:

1. Uncertainty in the economy changes people's perspective on how money is managed. Increased understanding of financial literacy, has an impact on decisions to invest better.
2. Investors who are faced with market uncertainty, tend to imitate the decisions of other investors. Ignoring the fundamental side of the company's ability, choosing to invest with the aim of making a profit
3. The community has adequate financial management knowledge, so they feel confident in their ability to make investments. Doing sales and purchases of shares with the belief that they will benefit from these activities, and ignore what is the fundamental side of the company.

The factors used in this study are limited to financial literacy, herding behavior and overconfidence. In future research, other factors such as accounting information, risk tolerance, neutral information and so on can be seen. Investor criteria used in further research can be more varied with other instruments such as mutual funds and crypto assets

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