

The Influence of Investors' Perceptions of Stock Influencer Credibility on Herding Behavior With Financial Literacy as a Moderating Variable

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ABSTRACT

This study aimed to analyze the effect of investor perceptions on stock influencers' credibility on herding behavior with financial literacy as a moderating variable. This research was conducted in the city of Malang. The number of samples in this study was 100 respondents. The Lemeshow formula determined it. Data collection was carried out through a questionnaire. The data analysis technique used in this study is Moderated Regression Analysis (MRA). Based on the analysis results, the credibility of stock influencers positively affects herding behavior. Financial literacy can weaken the influence of stock influencer credibility on herding behavior.

INTRODUCTION

The stock exchange is one place for investors to obtain profit through stock trading. Investors prefer stocks to other financial instruments because the results to be obtained are more excellent, even though high risks accompany them. In stock trading, investors need rational analysis to avoid mistakes and prevent higher risks (Kahneman & Riepe, 1998). However, there are several cases where investors do not carry out rational analysis but follow the decisions of other investors in buying shares, which is called herding (Baker et al., 2019).

Herding behavior in financial markets can be identified as a tendency for investor behavior to follow the investment decisions of other investors (Lao & Singh, 2011). Investors may imitate other investors if they think that the behavior of other investors can add information and be more profitable (Andrea & Welch, 1996; Kallinterakis et al., 2010). Investors' irrational behavior makes the market panic, making market movements abnormal. If this situation occurs, the share price on the stock market does not reflect the actual economic situation, so an error in setting the share price can occur because there is a bias in making investment decisions. Investor behavior changes can affect market efficiency (Barber & Odean, 2000; Kumar & Goyal, 2015).

The theory used in this study is behavioral finance. Behavioral finance is a study of capital market investor behavior that explains the implications of psychological factors for decision-making intending to understand why investors buy and sell stocks (Gupta et al., 2014).

Financially stable investors usually dominate investors in the capital market. However, in recent years, the Indonesia Stock Exchange (IDX) has experienced an interesting phenomenon. Namely, amid the downturn in the real business sector, more millennials have started trying investment opportunities in the capital market. Based on statistical data from the Indonesian Central Securities Depository (KSEI), young investors who are less than 30 years old control up to 58.39% of all investors on the IDX. The dominance of young investors in the Indonesian capital market outperforms the contributions of more senior investors (KSEI, 2021). According to Strauss & Howe (2000), generation Y or Millennial is a generation whose birth year ranges from 1982 to 2002. Many millennial generation investors have prompted the government to seek ways to educate the Indonesian people about stock investment.

According to Volpe et al., (2002), investors aged 50 years or older have more knowledge than younger investors. Based on this statement, the millennial generation needs more investment knowledge. Investors with low financial literacy tend to make investment decisions that are more emotional and irrational (Disney & Gathergood, 2013; Utami et al., 2021). A lack of knowledge about investing causes investors to be confused about whether to use their information or move according to the group for decision-making. A lack of knowledge or understanding of available information will trigger herding behavior. As research conducted by Shahar et al., (2019) shows, financial literacy can reduce herding behavior in investment decisions.

Financial literacy can improve investors' ability to analyze a stock for rational investment decisions.

The recent presence of influencers who enter various sectors, including stock investment, has also become a concern. Some public figures often appear on television and social media, such as YouTube, Facebook, Instagram, and other social media (Rahmatika, 2021). Stock influencers often share information about the shares they already own and try to attract public attention and direct public opinion to buy the shares they own (Kádeková & Holienčinová, 2018). Influence is easier to accept when the influencer has better credibility (Alfarraj et al., 2021). However, not all influencers have competence regarding stock information, many of whom only provide information about profits without explaining opportunities for losses. Fundamental and technical analyses regarding stock investment often accompany information and recommendations influencers disseminate. Such information is sometimes swallowed up raw by its followers on social media, so it is very prone to experiencing losses. According to Brown & Hayes (2008:50), influencers significantly shape the decisions of their followers but do not necessarily fully influence the decisions of their followers. Investors consider an influencer to have better abilities than himself (Lao & Singh, 2011).

Several previous studies have focused on research that examines the impact of biased behavior on investment decisions with the moderating Role of financial literacy (Adil et al., 2021; Hayat & Anwar, 2016), how financial literacy and demographic variables relate to biased behavior (Baker et al., 2018), overconfidence and investment experience on herding behavior with the moderating effect of financial literacy (Shahar et al., 2019). Research results from Chairunnisa & Dalimunthe (2021) Indonesia stock's influencer phenomenon: Did financial literacy on millennial age reduce herding behavior? However, the results of his study show that financial literacy does not moderate the effect of stock influencers on herding behavior. In this study, researchers used financial literacy as a moderating variable to test how investors' perceptions of stock influencer credibility affect herding behavior.

Herding behavior is a condition in which an individual imitates the behavior or decisions of a group (Bobe & Piefke, 2019). When investors do herding behavior, they deny their beliefs and existing information (Shahar, et al., 2019). However, another opinion states that herding behavior can occur when investors do not have special knowledge about the stocks they choose. An investor who follows the decisions of other investors admits that he needs to gain knowledge and confidence in the investment he has chosen. However, these investors want to retain the opportunity to return, so they follow other investors (Goyal & Gaur, 2019). Investors follow the group because they need to prepare for the risk of loss.

According to Susanto & Anastasia (2019), their herding behavior of them is caused by the influence of social media, where the words of others easily influence a person. Influencers recommending stocks can create biased behavior among their followers. Influencers make a statement persuasive enough to influence followers' intentions in investing. For some, followers imitate decision

influencers giving investors confidence and optimism in investing (Novianggie & Asandimitra, 2019). In addition, the influence of influencers is easier to accept when the influencer's credibility is better (Alfarraj et al., 2021). The price of a stock often looks different when an influencer recommends a stock. The phenomenon shows that a show follower or his followers make transactions based on someone's recommendation influencer. Most investors follow the advice of influencer stocks or friends who have experience investing in hopes of higher returns.

LITERATURE REVIEW

Several previous studies regarding the influence of credibility influencer stock on herding behavior, including, according to Lou & Yuan (2019), that the informative value of the content produced influencer, namely trust, attractiveness, and similarity with followers, positively influence followers. According to Bizzi & Labban (2019) , social media (influencer) affects online trading, mostly in behavior herding. In addition, according to Chairunnisa & Dalimunthe (2021), influencer credibility effect behavior herding investors. Therefore, active social media investors will be more easily influenced by stock influencers, ultimately leading to behavior herding. Because of the level of credibility, influencers cause behavior herding. Influencer Credibly and reliably recommend stocks to make investors imitate influencers in investing.

H1: Stock influencer credibility has a positive effect on herding behavior.

Financial literacy is a person's ability to manage financial resources effectively (Coşkun et al., 2016; Disney & Gathergood, 2013). Good financial literacy can make a significant difference in financial behavior. First, financial literacy helps investors to refute irrelevant information (Sabir et al., 2019). Second, financial literacy also gives investors the ability to analyze in choosing financial products (Arifah & Dalimunthe 2020). Third, financial literacy can isolate investors from herding behavior (Adil et al., 2021). The low level of financial literacy causes biased behavior because psychology influences decisions more than knowledge (Mouna & Anis, 2015). Investors committed to herding behavior usually have low financial literacy because they have low trust in their investments (Novianggie & Asandimitra, 2019). An investor's low level of financial literacy will be easily influenced by the environment, such as suggestions from family, friends, and influencers (Hayat & Anwar 2016; Khalid et al., 2018). Therefore, Influencer credibility to herding behavior can be weakened by moderating financial literacy due to the ability of investors to use their ability to analyze financial information properly rather than following recommendations of stock influencers and herding.

H2: Financial literacy weakens the influence of stock influencer credibility on herding behavior.

METHODOLOGY

This research is a type of quantitative research. The data in this study were obtained by distributing questionnaires via Google form to investors. Giving scores to each proxy from village officials in this study used a Likert scale

which has a score of 1 to 5. The meaning of the numbers in each answer choice is: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

The population of this study is individual investors who have invested or are currently investing in stocks through investment galleries in Malang, with the criteria of investors aged between 20 and 40 years (Millennial Generation). According to Strauss & Howe (2000), generation Y or Millennial is a generation whose birth year spans from around 1982 to 2002. Researchers used the millennial generation as respondents because, according to the Central Bureau of Statistics (2021), the millennial generation 25 years and over dominates social media. Therefore, group Millennials are closer to social media. As a dominant social media group, influencers influence millennials more easily in investment activities. In addition, according to the Financial Services Authority (OJK), the level of financial literacy in Malang is the highest in Indonesia, reaching 69.43%, Solo at 58.55%, and Jember Regency at 58.55%.

The sample is essential to the population (Sekaran, 2013). The sampling technique in this study uses simple random sampling. The population in this study is unknown, so this research measures the sample size using the formula Lemeshow (Levy & Lemeshow, 2013). The sample size to be studied is as follows:

$$n = (Z^2 P (1-P)) / d^2$$

n = Number of Samples

Z = Standard Value 95% = 1.96

P = Maximum Estimate of 0.5

D = Alpha (0.10) or Sampling error = 10%

Based on the formula above, the sample obtained in this study is:

$$n = (Z^2 P (1-P)) / d^2$$

$$n = ([1,96]^2 0,5 (1-0,5)) / [0,1]^2$$

$$n = (3,8416 0,25) / 0,01$$

$$n = 96,04 \text{ (rounded 100)}$$

The instrument to collect data in this study is a questionnaire. The development of the questions in the questionnaire used the question model in previous research, but the researcher made adjustments according to the research object. This questionnaire measures variables influencing credibility stocks, herding behavior, and financial literacy.

This study uses analysis Moderated Regression Analysis (MRA) to find out whether the moderating variable (financial literacy) acts as a variable that can strengthen or weaken the effect of the independent variable (Stock influencer) on the dependent variable (herding behavior). Model regression equation Moderated Regression Analysis (MRA) is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3 X_1X_2 + e$$

Y = Herding Behavior

a = constant

β_1 - β_3 = regression coefficient

X1 = Stock Influencer

x2 = Financial Literacy

$X1.X2$ = Interaction between Stock Influencers with Financial Literacy
 e = error term (an error rate of the estimator)

RESEARCH RESULT AND DISCUSSION

Descriptive statistical analysis

Table 1. Descriptive statistical analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Stock Influencer Credibility	100	36	75	58.48	5.260
Financial Literacy	100	33	55	44.44	3.644
Herding Behavior	100	13	40	29.83	3.980
Valid N	100				

Source: Processed Data, 2023

Based on the table above, it shows that N, or the amount of data for each valid variable, is 100. Out of 100 sample data of herding behavior (Y), the minimum value is 13, and the maximum is 40. It is also known that the mean value is 29.83, and the standard deviation value is 3,980, which means that the mean value is greater than the standard deviation value so that the data deviation that occurs is low, and the distribution of values is even.

The stock influencers' credibility (X1) from 100 samples is known that the minimum value is 36, the maximum value is 75, it is also known that the mean value is 58.48, and the standard deviation value is 5,260, which means that the mean value is greater than the standard deviation value so that data deviations occur low, the distribution of values is even.

Financial literacy (X2) of 100 samples is known that the minimum value is 33, the maximum value is 55, it is also known that the mean value is 44.44, and the standard deviation value is 3,644, which means that the mean value is greater than the standard deviation value so that data deviations that occur are low then the distribution is even.

Validity and Reliability Testing

Validity Test

Testing the validity of this study used the Pearson correlation coefficient, namely by calculating the correlation between the scores of each question item and the total score. If the significance value is <0.05 , the item is said to be valid ($\alpha=5\%$) (Hair et al., 2010). The validity test results for each question item show a significance value of $0.000 <0.05$. So it can be concluded that all question items are declared valid.

Reliability Test

Reliability aims to see the reliability of measurement (Juliansyah, 2014). A construct is reliable if it gives Cronbach's Alpha > 0.6 (Eisingerich & Rubera, 2010). The data obtained were calculated using the SPSS test to determine the reliability of the data. It is known that the Cronbach's Alpha value for the credibility of the stock influencer variable is $0.906 > 0.600$, the herding behavior

variable is $0.888 > 0.600$, and the financial literacy variable is $0.865 > 0.600$. So from the test results, all variables are declared reliable.

Classical Assumption Testing

The normality test used the Monte Carlo Sig model test in this study. (2-tailed) value shows $0.052 > 0.05$, so it can be concluded that the residuals or research data are typically distributed. Then based on the heteroscedasticity test, the points spread randomly and are spread both above and below the number 0 on the Y axis, and there is no clear distribution pattern of the data. These results prove that there is no heteroscedasticity.

Moderated Regression Analysis (MRA) Testing

Table 2. Moderated Regression Analysis (MRA) Test

Variable	Beta	t Count	Sig	Inform
Stock Influencer Credibility	2,063	3,447	0,001	Significant
Financial Literacy	0,668	1,244	0,217	Significant
Stock Influencer Credibility * Financial Literacy	-2,267	-2,267	0,022	Significant
Constant	-34,324			
F Count	24,765			
Sig. F	0,000			

Source: Processed Data, 2023

The results of the statistical analysis regarding the influence of the independent variable (stock influencer credibility) on the dependent variable (herding behavior) using a moderating variable (financial literacy). The results regarding the analysis (MRA) are as follows:

The influence of stock influencer credibility on herding behavior

The results of this study prove that the stock influencers' credibility has a positive effect on herding behavior. The result of the statistical analysis shows that the first hypothesis is accepted. That is, the higher the stock influencer's credibility, the higher the herding behavior of an investor. It is known that influencers who are credible and trusted when recommending stocks make investors imitate and follow advice from influencers in investing.

Herding behavior occurs due to the influence of social media, where a person is easily influenced by the words of other people or influencers (Susanto & Anastasia, 2019). The millennial investor generation is a generation that is active on social media and dominates social media. Therefore, it is easy for influencers to channel or convey their stock views to investors. Motivate investors to imitate their goals to be successful like influencers in investing. Investors want higher returns without higher risks, so herding behavior is a

shortcut for investors to invest (Zhang, 2020). Thus the trust of stock influencers influences investors' intention to invest.

The findings in this study are interesting because the influence of stock influencer credibility on herding behavior is not common in finance. The traditional financial theory assumes that investors will make rational decisions by balancing expected returns and risks. However, these findings prove that behavioral finance theory, according to Gupta et al., (2014); Ross et al., (2016), investors tend to exhibit biased behavior and the influence of psychological factors in decision-making.

This study supports several previous studies that examined the influence of stock influencer credibility on herding behavior. Among them were carried out by Bizzi & Labban (2019); Chairunnisa & Dalimunthe (2021), whose results show a positive influence of the stock influencer's credibility variable on herding behavior.

This finding has both good and bad implications for the capital market. The indication is that influencers can create imitation effects in investment decisions, providing opportunities for issuers to use influencers to drive market prices. In this situation, the market price no longer reflects the fair value. In addition, the higher the price distortion, the higher the risk of a sudden price correction. As a result, market volatility is high. This situation reflects the poor quality of the capital market because price movements are not due to information entering the market but behavior that leads to poor information value. Regulators must take action to minimize price movements that do not reflect information.

The effect of financial literacy in weakening the stock influencer's credibility on herding behavior

The results of testing the second hypothesis indicate that financial literacy can moderate the influence of stock influencer credibility on herding behavior. The results of this study accept the second hypothesis (H2) that financial literacy can weaken the influence of stock influencer credibility on herding behavior. Financial literacy can reduce investor herding behavior caused by the influence of influencer credibility.

The higher the investor's financial literacy level, the lower the herding behavior. If investors behave in herding behavior, they usually have low financial literacy because they do not have confidence in their ability to invest (Novianggie & Asandimitra, 2019). There are several benefits if investors have good financial literacy. First, irrelevant information will be easily identified if investors are financially literate (Sabir et al., 2019). Second, investors can analyze financial products if they have good financial literacy (Arifah & Dalimunthe, 2020). Third, with financial literacy, investors will avoid herding behavior (Adil et al., 2021).

The traditional financial theory assumes that every human behavior is rational. However, these findings prove that investor behavior is sometimes not always rational. As decision-makers, investors make different decisions because investors do not always behave rationally. According to Gupta et al., (2014); Ross et al., (2016), this follows the behavioral finance theory that investors do

not always act rationally, and there is the influence of psychological factors in decision-making.

CONCLUSIONS AND RECOMMENDATIONS

Based on the study's results, it can be concluded that the stock influencers' credibility positively affects herding behavior. The higher the stock influencers' credibility, the higher the herding behavior of an investor. This study supports the finance behavior theory that investors are not always rational, but there are psychological factors involved in the investment decision-making process. In addition, financial literacy can weaken the influence of stock influencers' credibility on herding behavior. Financial literacy can reduce the influence of stock influencers' credibility on herding behavior. This research can provide empirical evidence and confirm finance behavior theory on herding behavior.

ADVANCED RESEARCH

This research still has limitations so it is necessary to carry out further research related to the topic "The Influence of Investors' Perceptions of Stock Influencer Credibility on Herding Behavior With Financial Literacy as a Moderating Variable" to perfect this research, as well as increase insight for readers.

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