

HERDING BEHAVIOR OF INDONESIA INVESTOR: ROLE OF PERSONALITY TRAITS AND MOTIVATION FACTORS

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Abstract: This study aimed to determine the relationship between personality traits and motivation factors that causes herding behavior among individual investors in Indonesia. Personality traits included compliant, aggressive, and detached, while motivation factors used the cognitive ability, social factors, and emotional factors. This study's research method uses an online survey by distributing questionnaires to the stock investor in Indonesia. There were 460 questionnaires collected from the distribution of 1,534 sets of the questionnaire, and there were also 52 sets of the questionnaire are incompleting—the collected sets of data analyzed by using multiple regression. This study indicates that a compliant and aggressive personality has a significant positive effect on herding behavior. Meanwhile, a detached personality has a significant negative effect on herding behavior. Apart from that, the motivational factors that comprise cognitive ability, social factors, and emotional factors also significantly affected herding behavior

Keywords: *Personality Traits, Motivation Factors, Herding Behavior*

1. Introduction

Investment is believed to be one of the factors driving economic growth in a country. Investment also plays a national income component, Gross Domestic Product (GDP) or Gross Domestic Product (GDP). Investment has a positive relationship with GDP or national income. If investment increases, GDP will rise, and vice versa. When investment falls, GDP will also decrease (Sugiarto, 2019). It led the government to invite foreign and domestic investors to invest in Indonesia because it is needed to develop Indonesia.

Indonesian public's awareness to invest in financial instruments and capital markets has increased from year to year. Especially for investment in financial instruments in the capital market itself, it has been proven by the growth in the number of investors in the Indonesia Stock Exchange (IDX), which increased by 67.28% at the end of June 2020 compared to the previous five years. Based on PT Custodian Sentral Efek Indonesia, one of the Self Regulatory Organizations in the Indonesian Capital Market, which acts as a Depository and Transaction Settlement Institution, as of 30 June 2020, the total number of investors in the Indonesian Capital Market was 1,506,026 Securities Sub Accounts. It increases when compared to 5 years previously at the end of June 2015 with a total of only 492,829 SRE. This increase also occurred in the total number of stock investors, which rose by 68.19% in

the last five years, namely 1,214,358 Single Investor Identification (SID) at the end of June 2020 the previous five years which only recorded 386,343 SID at the end of June. 2015.

It is ironic compared to Indonesia's total population based on the population census conducted by the Central Statistics Agency in 2015, 237,641,326 people. It is projected that in 2020 it will increase to 271,066,000 people, so the number of investors in the capital market is relatively small, namely, 0.56% consisting of retail and institutional investors with the dominating choice of stock instruments. Meanwhile, in the Riau Islands region at the end of June 2020, the number of investors in the capital market was 17,915 SRE. It shows an increase of 81.13% over the last five years compared to the end of June 2015, indicating only 3,381 SRE. It proves that the Indonesia Stock Exchange's performance is very good for increasing the number of capital market investors in Indonesia.

When viewed from the percentage comparison between the total population and total investors, the number is still relatively small. It shows that the majority of Indonesians are still not aware of the importance of investment. The public is not yet fully aware of inflation triggered by soaring prices for goods and services, while the increase in annual income is relatively low. Indonesian people should be more mindful of the importance of long-term investment to fight inflation. The Indonesian people still view that investment is only for those who have significant capital. Meanwhile, in reality, investment does not need a large amount of capital instead of a relatively small nominal deposit adjusted to the Indonesian people's capabilities.

Although the number of investors in the capital market is still relatively small compared to Indonesia's total population, the number of investors in the capital market has increased significantly compared to the previous five years. Besides, the dynamics of capital market developments in Indonesia directly influence investor behavior. One of the exciting things in the capital market that is important to research is investors' herding behavior.

Herding behavior is a very well-known topic in financial research. Many researchers have analyzed the herding phenomenon in both portfolio management and other financial literature. This herding behavior has occurred in all stock markets globally, as evidenced by the number of researchers researching herding behavior until 2020. In the financial literature, herding behavior is often used to describe the correlation between investors' trading interactions. This behavior is often considered a rationale for an ordinary investor to follow other investors' more successful activities. Factors that cause herding behavior include negative news sentiment on stocks, market uncertainty and company performance uncertainty, volatility risk, the occurrence of economic crises, rising interest rates, and others. It makes herding behavior interesting to study from a variety of different points of view. introduction includes the background to the issue or problem as well as the urgency and rationalization of activities (research or service).

Herding behavior is the behavior of investors who follow other investors' decisions so that most investors have similar trading patterns even though they do not have specific information or reasons why most investors follow similar trading decisions (Litimi, 2017). Herding behavior is defined as an investor's clear intention to imitate the behavior of other investors. Several theories intend to explain why rational investors prefer to imitate the decision-making of others rather than act on their analysis and information. One view focuses on the psychology of investors who prefer conformity. In contrast, other views are based on investors' belief that other investors may have better and more information (Geetha, 2019).

Herding behavior occurs due to the lack of transparency of information available on the market. Investors feel that the information needed to make investment decisions is insufficient. Herding behavior occurs when the market is not transparent, that is, when investors face uncertain public information sources and receive unclear signals about the company in the future (Arisanti & Oktavendi, 2020). eHerding behavior is a part of financial behavior, and many researchers find investor psychology as a significant variable that influences investment behavior. Herding behavior has been widely studied, but there are no consistent models and results to show whether the herding behavior exists (Yao & Tangjitprom, 2019).

Kumari *et al.* (2019) examined the relationship between personality, motivational factors, and herding behavior for individual investors in India. Investor personality is classified according to personality traits (compliant, aggressive, and detached) packaged in Horney's tripartite model. The factors consist of cognitive motivation, social factors, and emotional factors. The results showed that it influenced herding behavior, whereas other personality traits had no influence. The results also show that motivational factors influence herding behavior.

Kawshala *et al.* (2020) investigated the effect of socio-economic, trading sophistication, and self-education, profession, and income, and trading factors included trading experience and trading frequency. The results showed that those who had lower educational qualifications, were involved in the financial profession, had meager monthly income, had low experience, and rarely traded are tend to have the herding behavior. It also happened in women. Self-reflection can be seen in the herding bias. On the other hand, age does not affect herding behavior.

Nair *et al.* (2017) examined the factors that influencing the herding behavior of Indian stock investors. The result showed that gender, age group, marital status, word of mouth affect the herding behavior of investors. Ali Shusha and Abdelaziz Touny (2016) investigated the effect of attitudinal determinants on herding behavior. The results show that decision accuracy, hasty decision, and investor mood are the main attitude determinants that explain why individual investors have the herding behavior. The effects may be differ based on the investors' demographic factors.

A compliant personality is the submissive who wants to feel loved, accepted, approved, and observed. This personality type also wants to feel needed, cared for, helped, protected, and guided by others. These individuals are sensitive to the needs of others in their social environment, so that they try to meet other people's expectations spontaneously. As such, they are compatible, wise, grateful, and generous in their environment (Aydin *et al.*, 2014). The study of Kumari *et al.* (2019) showed that compliant personality positively affects herding behavior. This personality type is more prone to herding behavior. Therefore, the first hypothesis developed as:

H₁: Compliant personality makes an investor tend to have herding behavior.

The aggressive personality types are individuals who think that everyone is the enemy and only pays attention to their gain. The main need for this individual is to use domination on others, be superior, successful, prestigious, and known by others. They present themselves as the most powerful, cunning, and most wanted people. It makes them try to develop skills and

proficiency (Aydin *et al.*, 2014). This type of individual is also expected to show moderate herding behaviour. Therefore, the second hypothesis developed as:

H₂: Aggressive personality makes an investor tend to have herding behavior.

Detached personality types are individuals who become estranged from others. These individuals create emotional distance between themselves and other individuals. They do not communicate with other people and try to be independent because they do not like socializing and long-term social obligations. People with the detached personality type are introverted and do not talk about their personal lives. They do not agree to share any experiences. The essential values are not being influenced, staying away from pressure, not being attached to anyone. They dislike social norms and reject other people's suggestions and suggestions because they feel dominated (Aydin *et al.*, 2014). This personality type is expected to discourage herding behavior. Therefore, the third hypothesis developed as:

H₃: Detached personality makes an investor less to have herding behavior.

Cognitive ability refers to mental abilities. Information plays an essential role in the stock market. Investors will make better investment decisions if they have information accessibility and capabilities. Investors who do not have information accessibility and capabilities are referred to as limited rationality. Individuals with high cognitive abilities tend to be less risk-averse and show more tolerance in risky situations. So that experience in trading in this situation causes investors to have a herding behavior. Investors who have low cognitive abilities and trading experience have a higher tendency to the group. So, an individual's cognitive capabilities play an essential role in leading investors in the capital market (Kumari *et al.*, 2019). Therefore, the fourth hypothesis developed as:

H₄: Cognitive capability makes an investor tend to have herding behavior.

Social factors form individual identity and influence individual preferences. These factors also influence herding tendencies when an individual is strongly correlated with group norms, which creates social pressure from the group and results in a lack of confidence in their judgment. Social emotions can cause social grazing and influence. When a person does not conform to social norms, it creates feelings of negative emotions between them. Individuals react differently to social uncertainty than to isolation, which leads to unconscious herding behavior (Kumari *et al.*, 2019). Therefore, the fifth hypothesis developed as:

H₅: Social factors make an investor tend to have herding behavior.

Irrational behavior and emotions influence financial and economic decisions. This emotional factor is closely related to personality traits such as greed or fear. These personality traits are emotions that influence portfolio selection. Other emotions such as irrational excitement and market panic situations reflect the interaction of greed and hope and risk, anxiety and fear. Herding behavior occurs when fear persists in a market where there is high market volatility. Emotions and moods play an essential role in explaining behavior and financial choices (Kumari *et al.*, 2019). Therefore, the sixth hypothesis developed as:

H₆: Emotional factors make an investor tend to have herding behavior.

Based on the previous researches of personality traits and motivational factors, this study developed a conceptual framework as below:

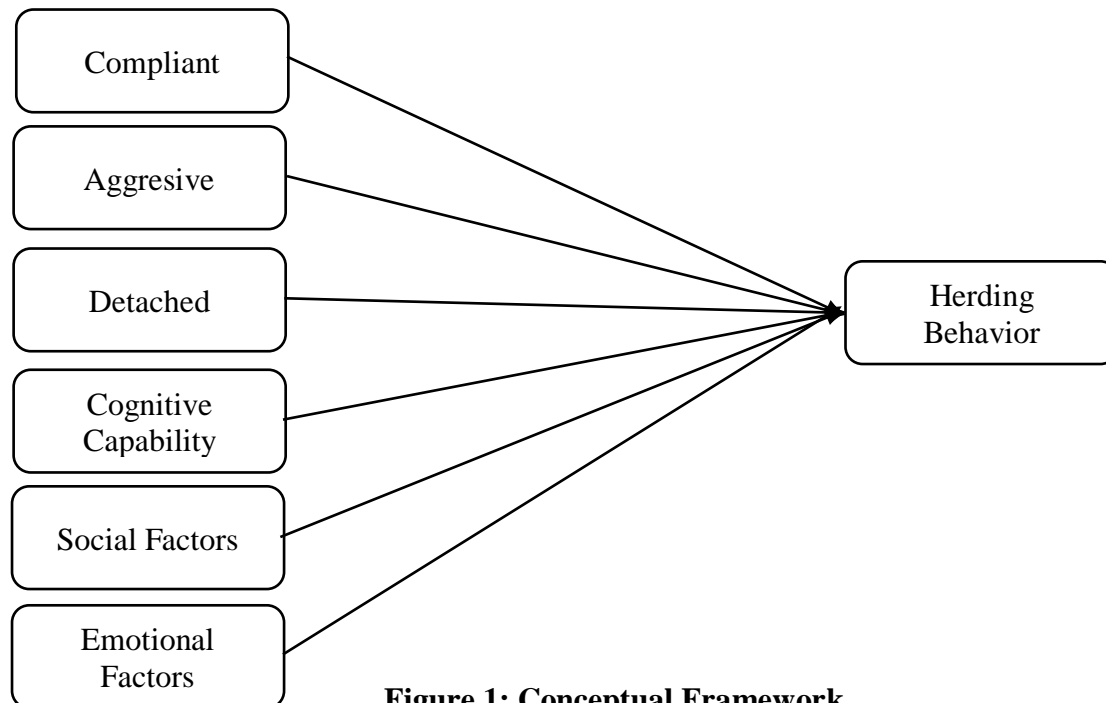


Figure 1: Conceptual Framework
(Source: Developed by the Authors, 2020)

2. Research Method

The population in this study are investors in Indonesia. The number of stock investors on the Indonesia Stock Exchange at the end of June 2020 was 1,214,358 SID based on the Indonesian Central Securities Depository data. This study uses primary data by distributing questionnaires. There were 1534 sets of questionnaires distributed, and 460 questionnaires were returned, and 52 questionnaires were incomplete.

The dependent variable in this research is herding behavior. There are three indicators in measuring herding behavior. Independent variables in this research use the factor of personality traits and motivation. Personality traits included compliant, aggressive, detached, while motivation factors contain cognitive capability, social factors, and emotional factors. In this research, each indicator in the questionnaires is measured using a Likert scale of 1 to 5. This study was tested through multiple linear regression analysis. The test starts from the classical assumption test with normality, multicollinearity, heteroscedasticity, autocorrelation, and outlier and continued with the t-test, F test, and the coefficient of determination test. This study also uses descriptive statistics test.

3. Results and Discussion

3.1. Results

There are ten from 408 questionnaires detected as outlier data. Table 1 below showed the descriptive statistics based on the demographic data of respondents:

Table 1. Statistics Descriptive

Description	Frequency	Percentage
Gender:		
Male	255	64.10%
Female	143	35.90%
Age:		
17 to 25	151	37.90%
26 to 35	139	34.90%
36 to 45	66	16.60%
46 to 55	37	9.3%
More than 56	5	1.3%
Education:		
Senior High School	101	25.40%
Diploma	35	8.80%
Bachelor	191	48.00%
Master	64	16.10%
Doctor	7	1.80%
Occupation:		
Civil Servant	29	7.29%
Private Employee	262	65.83%
Entrepreneur	58	14.57%
College Students	45	11.31%
Unemployed	4	1.00%
Income in Rupiah (in a year):		
Less than 10 million	45	11.30%
10 to 50 million	64	16.10%
50 to 100 million	152	38.20%
100 to 500 million	121	30.40%
500 million to 1 billion	8	2.00%
More than 1 billion	8	2.00%
Experience:		
Less than one year	151	37.94%
1 to 3 years	123	30.90%
3 to 5 years	75	18.84%
More than five years	49	12.31%

(Source: IBM SPSS Processed data)

The validity test was conducted to check each indicator's validity and the reliability used to check if the variables are reliable. After the validity and reliability test, it continues with the hypothesis testing, which showed in Table 2 as below:

Table 2. Hypothesis Testing

Model	Unstandardized Coefficients		Sig.	Result
	<i>B</i>	<i>Std. Error</i>		
(Constant)	2.035	0.882	0.022	
Compliant	0.069	0.082	0.404	H ₁ rejected
Aggressive	0.001	0.036	0.977	H ₂ rejected
Detached	-0.151	0.045	0.001	H ₃ accepted
Cognitive Capability	0.308	0.066	0.000	H ₄ accepted
Social Factors	0.137	0.041	0.001	H ₅ accepted
Emotional Factors	0.398	0.047	0.000	H ₆ accepted

(Source: IBM SPSS Processed Data)

3.2. Discussion

Table 2 showed that the compliant has a coefficient of 0.069 with a significance value of 0.404. It means that a compliant personality does not affect herding behavior significantly. The first hypothesis has been rejected. The same thing also happened in the second hypothesis, which showed a coefficient of 0.001 with a significance value of 0.977. The second hypothesis also has been rejected. Both personality types of compliant and aggressive do not make investors have herding behavior.

Variable of detached showed a coefficient of -0.151 and a significance value of 0.001. It shows that the personality of detached has a significant negative effect on the herding behavior. The motivation factors included cognitive capability, social factors, and emotional factors, respectively, with a coefficient of 0.308, 0.137, 0.398, and significance values below 0.05. It showed that the motivation factors have a significant positive effect on herding behavior.

4. Conclusion

This study aims to analyze personality traits and motivation factors that cause the herding behavior of individual investors in Indonesia. The result showed that compliant and aggressive personality traits do not affect herding behavior, while cognitive capability positively affects herding behavior. This study also showed that motivation factors affect herding behavior significantly. Cognitive capability, social factors, and emotional factors positively affect herding behavior.

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