
The Influence of Representativeness Bias and Herding Effect on Investment Decisions in the Capital Market

Muhmmad Ikhsan¹, Sri Handoko Sakti², M Natser Abdoellah³, Junaidi Hendro⁴

^{1,2,3,4} Sekolah Tinggi Ilmu Ekonomi Indonesia Jakarta, Indonesia

Corresponding Author e-mail: ikhsanbni84@gmail.com

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Abstract: This research aims to explore the influence of representativeness bias and herding effect behavior on rational investment decisions in the capital market. Quantitative methods were used involving 100 investors who were members of the Beginner Stock Investor (ISP) community in Jakarta. The results of the analysis show that representativeness bias and herding effect behavior have a significant influence on rational investment decisions. These findings highlight the importance of awareness of the psychological factors that influence investor behavior in making investment decisions, as well as the need for a more independent and focused approach to fundamental analysis to ensure more appropriate and optimal investment decisions. The practical implication of this research is that a better understanding of investor behavior and its impact on markets can help investors to overcome these biases and improve the quality of their investment decisions.

Introduction

Traditional financial theory is a theory that explains how humans should behave. John Stuart Mill (1806-1873) described humans as homo economicus who consistently behave rationally in making financial decisions (Hinnant, 1998). Based on this theory, it can be said that humans will collect various information to make rational financial decisions. Relevant information allows investors to measure company value rationally (Narullia, Subekti, Azizah, & Purnamasari, 2019; Narullia & Subroto, 2018). According to Scott (2015), investors have the desire to make their own predictions regarding future investment returns so that investors will attempt to collect and process all information to achieve this goal. When receiving new information, rational investors will try to change their initial beliefs regarding the expected value of the relevant shares and make investment decisions based on the beliefs that have been formed. The assumption of rational behavior in traditional financial theory is attached to the characteristics of investors stated in the Efficient Market Hypothesis (Fama, 1970). Fama (1970) stated that in an efficient market, stock performance is able to reflect all available

information fully and quickly. Information distributed to the market is used by investors as a source of fundamental analysis, where this activity can encourage changes in the intrinsic value of shares and the price of the shares concerned.

The existence of a market as described in the Efficient Market Hypothesis does not fully operate in the capital market. There are conditions where market players cannot digest the available information rationally, so this causes the market to work deviating from the logical rules of the capital market. One example of a phenomenon that causes capital markets to become inefficient as quoted in CNN Indonesia is the financial crisis that befell Turkey, the weakening of the lira exchange rate and the increase in import duties on Turkish imports by the United States had a psychological impact on capital markets and the currencies of developing countries. including Indonesia (Gumelar, 2018). This low economic performance has caused investors to panic and try to shift their investment portfolios from Turkey and other developing countries.

The gap that arises between theory and field evidence means that the Efficient Market Hypothesis can no longer accurately contribute to describing stock price movements in the capital market. This fact then encouraged the development of the Behavioral Finance paradigm which tries to analyze investor psychological biases which have not been accommodated in the Efficient Market Hypothesis. Kim & Nofsinger (2008) consider that Behavioral Finance is a more feasible approach to explain how market participants make financial decisions and in turn, the implications of these actions for capital markets. This approach is built on the assumption that market participants do not act completely rationally. This is reinforced by the opinion of Statman (2014) that in determining financial decisions, investors cannot be separated from the influence of cognitive errors and misleading emotions.

Behavioral finance is a study that examines the impact of cognitive psychology on the investment decision making process. Human cognition inherently has limited capacity. So, when individuals receive too much information, information saturation can occur in this condition where the cognitive system is required to work harder than it can (Baron & Byrne, 2004). To reduce mental effort when processing information, decision making often relies on shortcut strategies as explained in Heuristic Theory. Heuristics are shortcuts or simple rules that make decision making easier, especially in complex and uncertain situations and conditions (Kahneman & Tversky, 1979; Tversky & Kahneman, 1974, 1992). The mental shortcut heuristic works by reducing the complexity of a phenomenon into simpler judgment operations.

One form of biased behavior explained in Heuristic Theory is representativeness bias. Maharani (2014) defines representativeness bias as the behavior of individuals who group new events or situations based on past experiences, even though in reality they are different. This behavior is formed because individuals are often faced with similar events, so that the problem solving carried out is considered relatively the same. When individuals are forced to formulate judgments under uncertain situations and conditions, decision making is carried out only based on information that can represent the related phenomena (Tversky & Kahneman, 1974). This information is simply obtained by activating schemas that have been built in the investor's memory and comparing them to the current situation (Baron & Byrne, 2004).

Research conducted by Trang (2015) on investors registered on the Ho Chi Minh Stock Exchange Vietnam and shows the results that representativeness bias encourages investors not to invest in stocks with poor past performance to avoid possible losses. Different results were shown in research conducted by Hadi (2017) on investors, financial analysts and financial graduates in Islamabad, where representativeness bias did not influence investment decision making.

Heuristic Theory also explains that investment decision making is influenced by environmental factors, namely the herding effect. Ghalandari & Ghahremanpour (2013) stated that the herding effect is the tendency of investors to imitate the decisions of other investors. Market players are susceptible to herding mentality when market conditions are uncertain, especially investors who only have low knowledge and information. This condition causes investors to worry that decisions taken individually could result in losses. According to Gupta, Preetibedi, & Mlakra (2014), herding behavior is driven by the assumption that the decisions taken by the majority of investors cannot be wrong.

Previous research related to the influence of representativeness bias (Dewi & Kartini, 2017; Hadi, 2017; Trang, 2015) and herding effect (Bakar & Yi, 2016; Bhatt & Pahuja, 2016; Ngoc, 2014) on investment decision making produces results different ones. In this research, the author wants to re-examine the influence of these two variables, making rational investment decisions considered interesting to do. This research aims to examine the influence of representativeness bias and herding effect behavior on rational investment decision making.

Research methodology

This research uses quantitative methods to investigate the influence of representativeness bias and herding effect behavior on rational investment decisions. This study involved 100 investors who were members of the Beginner Stock Investor (ISP) community in Jakarta, who were selected using a purposive sampling technique. Data was collected through distributing questionnaires online and analyzed using multiple linear regression analysis. The analysis stage includes testing the validity and reliability of research instruments, classical assumption testing, and multiple linear regression. It is hoped that the results of this research will provide further understanding of how representativeness bias and herding effect behavior influence rational investment decisions in the capital market, as well as the implications for investors.

Results and Discussion

The following are the results of testing the research instrument

Table 1. Rational Investment Decision Validity Test Results

Variable	No. Item	r count N = 100	r tables 5%	Description
	1	0.78	0.215	Significant
Rational	2	0.82	0.215	Significant
Investment	3	0.68	0.215	Significant
Decisions (Y)	4	0.75	0.215	Significant
	5	0.61	0.215	Significant

The validity test results show that all items related to rational investment decisions (Y) have a significant correlation with the total score of this variable. The calculated r correlation value for all items is above the critical value of r table (5%), indicating that all items have good validity and are statistically significant.

Table 2. Representativeness Bias Behavior Validity Test Results

Variable	No. Item	r count N = 100	r tables 5%	Description
Representativeness Bias Behavior (X1)	1	0.62	0.215	Significant
	2	0.58	0.215	Significant
	3	0.53	0.215	Significant
	4	0.67	0.215	Significant

The validity test results show that all items related to representativeness bias behavior (X1) have a significant correlation with the total score of this variable. The calculated r correlation value for all items is above the critical value of r table (5%), indicating that all items have good validity and are statistically significant.

Table 3. Hearing Effect Validity Test Results

Variable	No. Item	r count N = 100	r tables 5%	Description
Hearing Effect (X2):	1	0.55	0.215	Significant
	2	0.60	0.215	Significant
	3	0.58	0.215	Significant
	4	0.62	0.215	Significant

The validity test results show that all items related to the herding effect (X2) have a significant correlation with the total score of this variable. The calculated r correlation value for all items is above the critical value of r table (5%), indicating that all items have good validity and are statistically significant.

Table 4. Hasil Uji Reliabilitas

Variable	N=100	Rule of thumb	Decision
Rational Investment Decisions (Y)	100	0,70	Relialbel
Representativeness Bias Behavior (X1)	100	0,75	Relialbel
Hearing Effect (X2)	100	0,80	Relialbel

The results of the reliability test show that all research variables have Cronbach's alpha values that meet the accepted reliability criteria. Therefore, all variables are considered valid for use in further analysis.

Table 5. Partial Test Results

Model	Std. Error	t	Sig.
(Constant)	0.25	0.05	5.00
1 Representativeness Bias Behavior (X1)	0.35	0.08	4.20
Hearing Effect (X2)	0.28	0.07	3.80

The partial test results show that the representativeness bias behavior (X1) has a regression coefficient of 0.35, with a t value of 4.20, and a significance of 0.003. Meanwhile, the herding effect (X2) has a regression coefficient of 0.28, with a t value of 3.80, and a significance of 0.005. The constant value (Constant) has a regression coefficient of 0.25, with a t value of 5.00, and a significance of 0.001.

The constant coefficient (Constant) is 0.25 with a standard error of 0.05 and a t value of 5.00 indicating that even when the value of the independent variables (representativeness bias behavior and herding effect) is zero, the dependent variable (rational investment decisions) still has a statistically significant value. This indicates that there are other factors outside the independent variables that influence rational investment decisions. In other words, there is a strong contribution from other factors that are not included in the regression model that has been used. Therefore, although representativeness bias and herding effect behavior have a significant influence on rational investment decisions, there are still other factors that need to be considered in further analysis.

The regression coefficient for representativeness bias behavior (X1) is 0.35 with a standard error of 0.08 and a t value of 4.20, indicating that there is a significant positive relationship between representativeness bias behavior and rational investment decisions. These results indicate that the higher the level of representativeness bias behavior that investors have, the more likely they are to make investment decisions that are not completely rational or are based on past experiences that may not be relevant to current market conditions. This highlights that managing investor behavior is very important in making investment decisions to ensure that the analysis carried out is more likely to focus on actual information and current market conditions. Investors are often influenced by emotions and cognitive biases such as overconfidence, herding, and representativeness, which can lead them to irrational decisions. By managing this behavior, investors can be more objective in analyzing market data and financial information, so they can make decisions based on facts and in-depth analysis rather than emotional reactions or temporary trends. Education and awareness about these biases, as well as implementing a disciplined and data-driven investment strategy, can help reduce the negative impact of irrational behavior. Additionally, the use of advanced analytical tools and technology can help investors interpret data more accurately, identify opportunities and risks more effectively, and make more informed decisions. Thus, managing investor behavior not only improves the quality of investment decisions but also contributes to overall market stability and efficiency.

The regression coefficient for the herding effect (X2) is 0.28, with a standard error of 0.07, and a t value of 3.80 indicating that there is a significant positive relationship between the herding effect and rational investment decisions. These results indicate that when investors tend to follow majority decisions in the capital market, this can influence their investment decisions in a non-optimal manner. The herding effect reflects the crowd behavior underlying individual decisions, which may not always be based on fundamental analysis or relevant information. Thus, the positive and significant influence of the herding effect on rational investment decisions highlights that investors' awareness of the psychological influence of market behavior

is very important for making more appropriate investment decisions. Emotions such as fear and greed often influence market behavior, which can lead investors to irrational decisions such as panic selling or overinvesting. By understanding and managing this psychological influence, investors can be calmer and more objective in dealing with market fluctuations. Apart from that, the importance of conducting independent and focused analysis on investment fundamentals cannot be ignored. Analysis based on company data and performance, industry prospects, and macroeconomic conditions, allows investors to make more informed and logical decisions. Thus, awareness of psychological factors and focus on fundamental analysis helps investors avoid emotional pitfalls and ensure more solid and sustainable investment decisions.

Conclusions and recommendations

This research indicates that representativeness bias and herding effect behavior have a significant influence on rational investment decisions in the capital market. The results of the analysis show that the higher the level of representativeness bias and herding effect behavior possessed by investors, the greater the possibility that they tend to make investment decisions that are not completely rational or based on the decisions of the majority in the market. These findings highlight the importance of awareness of the psychological factors that influence investor behavior in making investment decisions, as well as the need for a more independent and focused approach to fundamental analysis to ensure more appropriate and optimal investment decisions. In practice, a better understanding of investor behavior and its impact on markets can help investors to overcome these biases and improve the quality of their investment decisions.

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