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Heuristic biases on perceived market efficiency case of Indonesia

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ABSTRACT

Understanding human behavior is the key to behavioral finance's significance in the financial world. The majority of research focuses on financial markets that are well-developed, and little is known about heuristic biases in the perception of market efficiency in emerging nations like Indonesia. The data collection technique in this research is a literature study that is directly related to heuristic bias in perceived market efficiency. Investors' heuristic biases have been measured using a questionnaire, containing numerous items, including indicators of speculators, investment decisions and perceived market efficiency variables. The sample consists of 150 investors trading on the BEI. A convenient, purposively sampling technique was used for data collection. To examine the relationship between heuristic biases, investment decisions and perceived market efficiency, hypotheses were tested by using correlation and regression analysis. Additionally, the research aims to forecast future directions in the field of behavioral finance, with the ultimate goal of offering fresh perspectives and insights into the field. This may encourage future research on heuristic biases in perceived market efficiency.

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1. Introduction

Behavioral finance is a relatively new field that seeks to combine behavioral and cognitive psychological theories with conventional economics and finance to provide explanations for why people make irrational financial decisions. Humans get confused when it comes to their investment decisions. People are not always rational and markets are not always efficient. Behavioral finance explains why individuals do not always make the expected decisions and why markets do not behave as expected. Behavioral finance is very popular in stock markets around the world for investment decisions.

Market efficiency means that the prices of securities that dominate financial markets reflect all available information (Fuentes, 2011; Malkiel, 2003). So, we can say that a market in which prices always adequately reflect all available information is called an "efficient market" (Fama, 1997; Lo, 2007). This research will explore how investor behavior can influence the market and make the market inefficient. Because according to behavioral finance experts, every individual has unavoidable psychological biases, which prevent them from making rational decisions and have bad consequences for investment decisions and perceived market efficiency.

Heuristics are rules of thumb, which decision makers use in complex and uncertain situations to make decisions easily (Brabazon, 2000; Ritter, 2003), by reducing the complexity of measuring probabilities and forecasting values into simpler judgments (Kahneman and Tversky, 1974).
Heuristics allow humans to speed up decision making, compared to rationally processing available information. In general, this heuristic is useful and useful when time is limited (Waweru et al., 2008), but sometimes leads to bias (Kahneman and Tversky, 1974; Ritter, 2003).

Standard finance does not show satisfactory patterns; they usually harm the performance of an investor's portfolio. But behavioral finance provides a satisfactory demonstration and understanding of why individual investors trade, how they select their portfolios and how they perform (Subrahmanyam, 2008).

2. Research Method

Data collected through questionnaires were processed and analyzed using SPSS software. Initially, a pilot test was carried out to verify the instrument's validity and reliability. It also served as an opportunity to refine the questionnaire by eliminating subpar questions, such as those with an excessive number of missing values or biased ratings. Then, statistical methods such as the Cronbach's Alpha test, descriptive statistics, correlation analysis, and regression analysis are employed to meet the goals of the research.

3. Results And Discussions

In this section, it is explained the results of research and at the same time is given the comprehensive discussion. Results can be presented in figures, graphs, tables and others that make the reader understand easily (Grieshaber, 2020). The discussion can be made in several sub-chapters. For testing, 150 questionnaires were sent to individual investors operating on the BEI and collected right after they completed them. This trial was carried out to determine the reliability of the items included in the instrument. The results showed that the Cronbach's Alpha value for all factors was greater than 0.6, and the F test was significant for each factor. This index shows that the items included in the variable are reliable for use in further analysis. The results of descriptive statistics and correlation between variables show correlation coefficients for five variables. The results show that each variable is perfectly correlated with itself because the correlation coefficient value is one ($r = 1$). The output also shows that overconfidence is negatively related to investment decisions, with a Pearson correlation coefficient of $r = 0.202$, which is significant at $p < 0.01$, and perceived market efficiency with a Pearson correlation coefficient of $r = 0.332$, which is significant at $p < 0.01$. This means that, as self-confidence increases, so does the quality of investment decisions and perceived market efficiency. The research results also show that the representativeness heuristic is negatively related to investment decisions, with a Pearson correlation coefficient $r = 0.459$, which is significant at $p < 0.01$, and perceptions of market efficiency with a Pearson correlation coefficient $r = 0.313$, which is significant. at $p < 0.01$. This means that, as representativeness increases, the quality of investment decisions and perceived market efficiency decreases. Availability bias is negatively correlated with investment decisions ($r = 0.459$, $p < 0.01$) and perceived market efficiency ($r = 0.313$, $p < 0.01$). This means that, due to the availability heuristic, the quality of investment decisions and perceived market efficiency decreases. Anchoring and adjustment biases are negatively related to investment decisions ($r = 0.307$, $p < 0.01$) and perceived market efficiency ($r = 0.238$, $p < 0.01$). The results show that the quality of investment decisions is positively related to perceived market efficiency, with a Pearson correlation coefficient of $r = 0.462$, which is significant at $p < 0.01$, which means that when investment decisions improve, market efficiency also increases.

Table 1. Result for reliability analysis

Variable	Cronbach Alpha	F (sig)
Overconfidence	0.828	5.025 (0.000)
Representativeness	0.697	17.255 (0.000)
Anchoring and Adjustment	0.669	4.669 (0.001)
Availability	0.839	7.718 (0.000)
Investment Decision	0.910	4.829 (0.001)
Perceived Market Efficiency	0.715	6.243 (0.000)

Table 2. Means, standard deviations and Pearson correlation

Variables	Mean	SD	1	2	3	4	5	6
Overconfidence	2.8365	0.47731	1					
Representativeness	2.8864	0.82369	0.535**	1				
Anchoring and Adjustment	2.7890	0.57223	0.421**	0.356	1			
Availability	2.8112	0.57301	0.621**	0.439**	0.492**	1		
Investment Decision	3.4580	0.93919	-0.294**	-0.459**	-0.263**	-0.307**	1	
Perceived Market Efficiency	3.4126	0.69026	-0.332**	-0.313**	-0.281**	-0238**	0.462**	1

Notes : N = 150

4. Conclusion

This study aims to investigate how heuristics affect individual investors' decisions based on perceived market efficiency and the BEI. In order to meet the study's goals, data were gathered from the target population using a questionnaire that asked closed-ended questions. Software called SPSS was used to analyze the gathered data. Based on convenience, 150 individual investors and brokers who trade on the BEI make up the sample. Regression analysis and correlation are used to test hypotheses The study's findings demonstrate that heuristic bias negatively impacts individual investors' decisions about investments based on their perceptions of market efficiency and BEI. We have discovered that heuristics that negatively affect perceptions of market efficiency and investment decisions include overconfidence, representativeness, availability, and anchoring. These findings are in line with the heuristic theory and prospect theory, which contend that investors make irrational decisions as a result of using heuristics to reduce the risk of loss in uncertain situations. This can lead to the market either overreacting or underreacting, in which case the market is inefficient. Investors may be familiar with the concept of heuristics having a negative impact on market efficiency and investment decisions. This is especially true if they are not familiar with the concept of behavioral biases in their personalities, which can have a very negative impact on both their investment decisions and market efficiency, which is dependent on the behavior of investors as individuals in the market. Suggestions for future research development include understanding the impact of heuristics on market efficiency and investment decisions, and identifying other factors that may moderate or influence the relationship. In addition, research can consider contextual variables that may play an important role in specific market situations, such as economic cycles, available news or information, and regulatory changes. Furthermore, it could consider expanding the sample coverage and using additional research methods, such as in-depth interviews or field observations, to gain deeper insights into investor behavior. Future research may also consider solutions or strategies that can help investors overcome heuristic biases and make more rational investment decisions. Thus, this research can make a more significant contribution to understanding financial market dynamics and investor behavior.

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