



THE IMPACT OF HERDING BEHAVIOR, HEURISTIC BEHAVIOR, DISPOSITION EFFECT, AND ATTITUDES TOWARD RISK ON STOCK MARKET INVESTMENT DECISIONS

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Abstract

This study aims to analyze the influence of herding behavior, heuristic behavior, disposition effect, and attitudes on risk on investment decisions in the stock market. This study uses a quantitative approach with a non-probability sampling technique through a purposive sampling method. The population in this study are individual stock investors in Indonesia whose exact number is unknown. The sample used was 101 respondents. Data collection was carried out through questionnaires. The data analysis method used was multiple linear regression with t-test, F-test, and coefficient of determination test. The results show that herding behavior has a significant positive effect on investment decisions, heuristic behavior has a significant negative effect on investment decisions, disposition effect has no significant effect on investment decisions, while attitudes on risk have a significant positive effect on investment decisions. The coefficient of determination value indicates that a relatively large variation in investment decisions is explained by the variables analyzed in this study.

Keywords: Herding Behavior, Heuristic Behavior, Disposition Effect, Attitudes on Risk, Investment Decision.

INTRODUCTION

The development of the capital market in Indonesia shows a significant increase in the number of retail investors in recent years. This growth is driven by easy access to digital technology and various capital market education programs. However, the increased participation of retail investors also presents challenges, particularly because most novice investors have limited experience and financial literacy when making investment decisions.

In traditional financial theory, investors are assumed to act rationally by considering information objectively. However, the behavioral finance approach explains that investment decisions are often influenced by psychological and emotional factors. Various behavioral biases can cause investors to deviate from fully rational decision-making.

One common bias is herding behavior, which is the tendency for investors to follow the majority decision without conducting in-depth analysis. Furthermore, under conditions of uncertainty, investors often use heuristic behavior, which involves cognitive shortcuts to simplify complex information. Another common bias

is the disposition effect, which is the tendency to sell profitable stocks and hold on to losing stocks due to emotional influences and loss aversion. Furthermore, attitudes toward risk are also important factors in determining investment decisions, as each investor has a different level of risk tolerance.

Previous research shows inconsistent results regarding the influence of these variables on investment decisions. Some studies find that herding behavior and attitudes toward risk have a significant influence, while others show conflicting results. Similarly, heuristic behavior and the disposition effect continue to show mixed empirical findings. These differing results indicate a research gap that requires further study.

Based on the phenomenon of increasing retail investors and the inconsistency of previous research results, this study aims to analyze the influence of herding behavior, heuristic behavior, disposition effect, and attitudes on risk on investment decisions in the stock market.

THEORETICAL BASIS

UNDERSTANDING INVESTMENT DECISIONS

Investing is placing funds in the hope of earning additional money or profit. Investing is essentially placing a sum of money now in the hope of earning a profit in the future.(Adnyana, 2020).

An investment decision is an action or policy involving investing capital in one or more assets with the goal of achieving a profitable return in the future. Furthermore, investment decisions are an ongoing process. If the performance measurement and evaluation phase shows less than optimal results, the investment decision can be re-made until the desired results are achieved.(Safitri & Rachmansyah, 2021).

Herding Behavior

According to Anwar et al.,(2024) Herding is a behavior that occurs when investors do not use their own knowledge and information in making decisions, but instead imitate the actions and decisions of other investors.Vuković & Pivac, (2023)He added that in the context of stock investing, people's judgments and actions tend to become similar due to collective reactions to the same information. Herding also often occurs when investors doubt their judgments and the information they have regarding an investment.

Heuristic Behavior

Heuristics are the process by which individuals reach conclusions based on available information. This typically occurs when investors lack the time and adequate information to evaluate an investment instrument, resulting in poor investment decisions.Anwar et al., (2024). According to Gavrilakis & Floros, (2022)defines a heuristic as the process by which a person reaches a conclusion based on available information. Often, due to time constraints or a lack of accurate information, individuals mistakenly believe that two similar events or things are more closely correlated than they actually are.

Disposition Effect

According to Prasetyo et al., (2023)The disposition effect is the tendency of

investors to sell stocks that have risen in price (gains) too quickly, while holding on to stocks that have fallen in price (losses) for too long. This effect arises from the psychological urge to avoid regret and the desire to maintain the hope that stocks that have fallen in value will rise again. Investors are also often afraid of losing profits that have been earned, so they tend to quickly realize profits before changes in market trends occur. (Subandi & Basana, 2021).

Attitudes on Risk

According to Baláž, (2021) Attitudes toward financial risks refer to the extent to which an individual is willing to accept the possibility of loss in financial decisions, whether expressed subjectively or as actually manifested in portfolio allocation. A person's personal attitude toward a behavior can result in positive or negative thoughts about that behavior. In the context of investing, individuals who tend to be risk-averse typically have a negative view of decisions that involve an element of uncertainty (Kurnia & Aprayuda, 2024).

METHOD

This study uses a quantitative approach to analyze the influence of *herding behavior*, *heuristic behavior*, *disposition effect*, and *attitudes on risk* on investment decisions in the stock market. The population in this study is individual stock investors in Indonesia, the exact number of which is unknown. The sampling technique used is the random sampling method. *non-probability sampling* with approach *purposive sampling*, namely a sampling technique that does not provide an equal opportunity for each member of the population to be selected as a research sample (Sugiyono, 2024).

The data sources used in this study consist of primary and secondary data. Primary data were obtained directly through questionnaires distributed to respondents who were individual stock investors. (Sugiyono, 2017). Meanwhile, secondary data was obtained from various literature sources such as books, scientific journals, articles, and previous research that is relevant to the research topic (Sugiyono, 2017).

The sample size for this study was 101 respondents. Data collection was conducted through an online questionnaire using a Likert scale to measure respondents' perceptions of each research variable. The independent variables in this study consisted of herding behavior, heuristic behavior, disposition effect, and attitudes on risk, while the dependent variable was investment decisions.

Data analysis was performed using multiple linear regression analysis. Prior to the regression analysis, the data were first tested through validity, reliability, and classical assumption tests. Hypothesis testing was performed using the t-test to determine the partial effect of each independent variable on investment decisions, the F-test to determine the simultaneous effect, and the coefficient of determination (R^2) test to determine the extent to which the independent variables explain the dependent variable.

RESEARCH RESULT

The normality test aims to determine whether the data in this study is

normally distributed. Data that meets the assumption of normality is considered more suitable for use in research analysis. The normality test in this study was carried out using the Kolmogorov-Smirnov (K-S) test on the residual values which can be seen in Table 1.

Table 1 Kolmogorov-Smirnov Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		101
Normal Parameters ^{a,b}	Mean	,0000000
	Standard Deviation	2.86359059
Most Extreme Differences	Absolute	,054
	Positive	,054
	Negative	-,037
Kolmogorov-Smirnov Z		,546
Asymp. Sig. (2-tailed)		,927

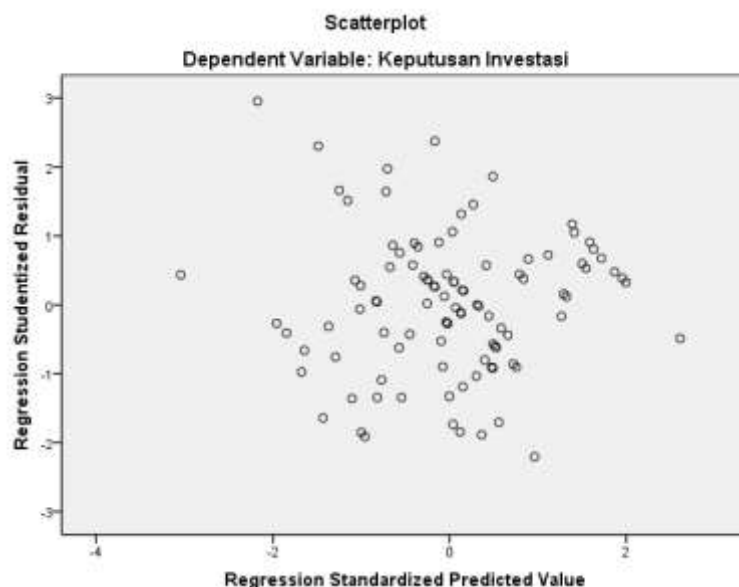
a. Test distribution is Normal.

b. Calculated from data.

Based on the test results in Table 1, the Asymp. Sig. (2-tailed) value was 0.927, which is greater than 0.05. Therefore, it can be concluded that the residual data in this study is normally distributed. Thus, the data on the Herding Behavior variable (X_1), Heuristic Behavior (X_2), Disposition Effect (X_3), Attitudes on Risk (X_4), and Investment Decision (Y) meets the normality assumption.

HETEROKEDASTICITY TEST RESULTS

A good regression model for heteroscedasticity testing is one that does not occur. To determine the presence of heteroscedasticity, a scatterplot test is used. The results of the heteroscedasticity test can be seen in Figure 1.



Picture 1

Scatter Plot Heteroscedasticity Test

Figure 1 shows that the data points are randomly distributed above and below the zero axis and do not form any particular pattern. This irregular distribution of points indicates that there is no heteroscedasticity in the regression model. Therefore, it can be concluded that the regression model in this study meets the heteroscedasticity assumptions and is suitable for use.

MULTICOLLINEARITY TEST RESULTS

A multicollinearity test was conducted to determine whether there was a high correlation between the independent variables in the regression model. A good regression model should not experience multicollinearity. The results of the multicollinearity test can be seen in Table 2.

Table 2 Multicollinearity Test Results
Coefficients

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
<i>Herding Behavior</i>	.850	1,176
<i>Heuristic Behavior</i>	.643	1,554
<i>Disposition Effect</i>	.531	1,884
<i>Attitudes on Risk</i>	.694	1,442

a. Dependent Variable: Investment Decision

Source: Processed Data (2026)

Based on the results of the multicollinearity test in Table 2, it is known that the tolerance value for the variable *Herding Behavior* (X_1) of 0.850, *Heuristic Behavior* (X_2) of 0.643, *Disposition Effect* (X_3) of 0.531, and *Attitudes on Risk* (X_4) of 0.694. All variables have a tolerance value greater than 0.10. Meanwhile, the VIF value for the variable *Herding Behavior* (X_1) of 1.176, *Heuristic Behavior* (X_2) of 1.554, *Disposition Effect* (X_3) of 1.884, and *Attitudes on Risk* (X_4) of 1.442, which indicates that all variables have a VIF value of less than 10. Thus, it can be concluded that there are no symptoms of multicollinearity between the independent variables in the regression model of this study.

MULTIPLE LINEAR REGRESSION TEST RESULTS

Multiple linear regression analysis was conducted to determine the influence of the variables herding behavior (X_1), heuristic behavior (X_2), disposition effect (X_3), and attitudes on risk (X_4) on investment decisions (Y) in the stock market.

The results of the multiple linear regression analysis can be seen in Table 3 below:

Table 3 Multiple Regression Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

(Constant)	.736	.315		2,334	.022
Herding Behavior	.273	.067	.279	4,076	.000
Heuristic Behavior	-.215	.061	-.276	-3,504	.001
Disposition Effect	.080	.091	.077	.882	.380
Attitudes on Risk	.696	.082	.641	8,445	.000

a. Dependent Variable: Investment Decision

Source: Research Results, processed data (2026)

Based on the results of Table 3 above, the regression equation formed in this regression test is:

$$Y = 0.736 + 0.273X_1 - 0.215X_2 + 0.080X_3 + 0.696X_4$$

The regression equation shows that the constant value (α) is 0.736, which means that if the variable *Herding Behavior* (X_1), *Heuristic Behavior* (X_2), *Disposition Effect* (X_3), And *Attitudes on Risk* (X_4) in a constant state or with a value of zero, then the Investment Decision value (Y) is 0.736. The coefficient value *Herding Behavior* (X_1) of 0.273 indicates a positive influence on investment decisions, so that if *Herding Behavior* increases by one unit, the investment decision will increase by 0.273 assuming other variables remain constant. The coefficient value *Heuristic Behavior* (X_2) as big as -0.215 indicates that there is a negative influence on investment decisions, so that if *Heuristic Behavior* increases by one unit, the investment decision will decrease by 0.215 assuming other variables remain constant. Furthermore, the coefficient value *Disposition Effect* (X_3) of 0.080 indicates a positive influence on investment decisions, so that if *Disposition Effect* increases by one unit, the investment decision will increase by 0.080 assuming other variables remain constant. The coefficient value *Attitudes on Risk* (X_4) of 0.696 also shows a positive influence on investment decisions, so that if *Attitudes on Risk* increases by one unit, the investment decision will increase by 0.696 assuming other variables are held constant.

PARTIAL TEST RESULTS (t TEST)

The t-test is used to determine the partial effect of the independent variable on the dependent variable. The t-value is obtained using the SPSS software application, as shown in Table 4 below:

Table 4t-Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.736	.315		2,334	.022
Herding Behavior	.273	.067	.279	4,076	.000
Heuristic Behavior	-.215	.061	-.276	-3,504	.001
Disposition Effect	.080	.091	.077	.882	.380
Attitudes on Risk	.696	.082	.641	8,445	.000

a. Dependent Variable: Investment Decision

Source: processed data (2026)

Based on the results of the t-test in Table 4, it is known that the variable *Herding Behavior* has a significance value of $0.000 < 0.05$, so it has a significant

positive influence on investment decisions. The variable *Heuristic Behavior* has a significance value of $0.001 < 0.05$ which shows that this variable has a significant negative influence on the decision *investment*. Meanwhile, the variable *Disposition Effect* has a significance value of $0.380 > 0.05$ so it does not have a significant effect on investment decisions. The variable *Attitudes on Risk* has a significance value of $0.000 < 0.05$ which indicates that this variable has a significant influence on investment decisions.

SIMULTANEOUS TEST RESULTS (F TEST)

To determine whether the hypothesis is accepted or rejected, we can look at the F value and its probability value. To see how much influence the Herding Behavior variable (X_1) has, we can use the F value and its probability value.¹⁾, *Heuristic Behavior* (X_2), *Disposition Effect* (X_3), and *Attitudes on Risk* (X_4) on Investment Decisions (Y) can be seen in Table 5 below:

Table 5 F Test Results
ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	20,594	4	5,149	38,576	.000a
Residual	12,813	96	.133		
Total	33,407	100			

a. Dependent Variable: Investment Decision

b. Predictors: (Constant), Herding Behavior, *Heuristic Behavior*, *Disposition Effect*, *Attitudes on risk*

Source: Processed data (2026)

Based on the F-test results in Table 5, the significance value is $0.000 < 0.05$. This indicates that the variables Herding Behavior, *Heuristic Behavior*, *Disposition Effect*, and *Attitudes on Risk* simultaneously have a significant influence on investment decisions among individual stock investors.

RESULTS OF THE COEFFICIENT OF DETERMINATION (R^2) TEST

The coefficient of determination test is conducted to determine the extent of the independent variable's contribution to the dependent variable. The R^2 value indicates the proportion of the variance in Investment Decisions (Y) that can be explained by Herding Behavior (X_1), *Heuristic Behavior* (X_2), *Disposition Effect* (X_3), and *Attitudes on Risk* (X_4). can be seen in Table 6 below:

Table 6 Test of coefficient of determination
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.785a	.616	.600	.36533

a. Predictors: (Constant), Herding Behavior, *Heuristic Behavior*, *Disposition Effect*, *Attitudes on risk*

b. Dependent Variable: Investment Decision

Source: Processed data (2026)

Based on the results of the determination coefficient test in Table 6, the Adjusted R^2 value was obtained as 0.600, which indicates that the variable *Herding Behavior, Heuristic Behavior, Disposition Effect, And Attitudes on Riskable* to explain 60% of the variation in investment decisions of individual stock investors, while the remaining 40% is influenced by other factors outside the research model.

DISCUSSION

The results of the study show that herding behavior has a positive and significant effect on investment decisions, which *shown* with a significance value of $0.000 < 0.05$. This indicates that investors tend to follow the actions or decisions of other investors when making investment decisions in the stock market, especially when facing information uncertainty or market risk. This behavior reflects investors' tendency to use majority decisions or market trends as a reference in making investment decisions without conducting in-depth analysis. This finding aligns with research by Safitri and Rachmansyah (2021), which states that herding behavior has a positive and significant effect on investment decision-making. Furthermore, research by Fitra (2023) also found that herding behavior has a positive influence on investment decisions. Research by Gavrilakis and Floros (2022) also supports these results by showing that herding bias has a significant impact on investment behavior, particularly in portfolio construction for both individual and professional investors.

The results of the study indicate that the significance value of the heuristic behavior variable is $0.001 < \alpha 0.05$, thus the hypothesis is accepted. The negative regression coefficient value indicates that heuristic behavior has a negative and significant effect on investment decisions in the stock market. This means that the higher the tendency of investors to use heuristic behavior, the more likely they are to decline in investment decisions. These results are inconsistent with Fitra's (2023) study, which found that heuristic behavior has a positive but insignificant effect on investment decisions. This difference in results indicates that heuristic behavior does not always have a strong impact on investment decisions and can produce different directions of influence in different investor contexts. Furthermore, these results are also inconsistent with Gavrilakis and Floros' (2022) study, which stated that heuristic bias has a positive and significant effect on investment behavior, particularly in portfolio construction.

The results of the study indicate that the significance value of the disposition effect variable is $0.380 > \alpha 0.05$, thus the hypothesis is rejected. This means that the disposition effect does not have a significant influence on investment decisions in the stock market. Therefore, it can be concluded that investors' tendency to hold on to stocks experiencing losses and sell stocks experiencing profits is not a major factor in making stock investment decisions. The results of this study are inconsistent with research conducted by Fitra (2023), which stated that the disposition effect has a positive and significant influence on investment decisions. Furthermore, the results of this study are also inconsistent with research by Prasetyo, Sumiati, and Ratnawati (2023), which shows that the disposition effect has a significant influence, but its influence can be influenced by moderating variables such as financial literacy.

The results of the study indicate that the significance value of the attitudes on

risk variable is $0.000 < \alpha 0.05$, thus the hypothesis is accepted. This means that attitudes on risk have a significant influence on investment decisions in the stock market. This means that the higher an investor's attitude or readiness to face risk, the more likely they are to make investment decisions. The results of this study are partially consistent with previous research by Bone and Saputra (2019), which showed that individual factors such as experience and risk perception influence attitudes toward risk and investment decisions, supporting the importance of attitudes on risk in investment decision-making. Meanwhile, research by Fitra (2023) found that attitudes on risk had a significant but negative effect on investment decisions, which is in a different direction from the results of this study.

CONCLUSION

Based on the research results and discussion, it can be concluded that herding behavior, heuristic behavior, the disposition effect, and attitudes on risk simultaneously have a significant influence on investment decisions among individual stock investors. Partially, herding behavior and attitudes on risk have a positive and significant influence on investment decisions, while heuristic behavior has a significant, but negative, influence on investment decisions. Meanwhile, the disposition effect does not significantly influence investment decisions.

Based on these research findings, investors are expected to be more informed in making investment decisions by considering various relevant information and analyses, avoiding relying solely on the behavior of other investors. Furthermore, investors need to have a good understanding of investment risks to make more rational and informed investment decisions. For future researchers, this study's findings are expected to serve as a reference for conducting similar research by adding other variables related to financial behavior or investment decisions, thus providing more comprehensive research results.

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