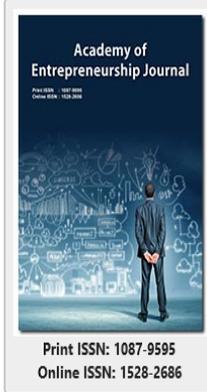




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**Author(s):** I Wayan Widnyana, Ni Putu Yeni Astiti, I Wayan Suarjana

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# IRRATIONAL, EMOTION, ILLUSIONS OF CONTROL INVESTORS ON INVESTMENT DECISIONS IN THE INDONESIAN CAPITAL MARKET

I Wayan Widnyana, Universitas Mahasaraswati Denpasar  
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## ABSTRACT

*Investment decision making is a process of selecting the best alternative from a number of available investment alternatives in the psychological situation and condition of the investor at a certain time. Investment decision making will be greatly influenced by the information received, as well as the level of ability and knowledge of investors about investment. This study aims to determine the effect of irrational, emotion and illusion of control investors in making investment decisions in the Indonesian capital market. The survey was conducted on 100 investors in 5 investment galleries in Bali. Primary data was collected through questionnaire distribution, then analyzed descriptively using SPSS V.26.0 program. The results of this study indicate that investors' irrational, emotion and illusion of control have a negative and significant effect on investment decision making in the Indonesian capital market. This means that the higher the investor's irrational, emotion and illusion of control, the lower his investment decision-making ability. This shows that there is a psychological tendency for investors to influence their decisions in making decisions.*

**Keywords:** Irrational, Emotion, Illusion of Control Investors, Investment Decision Making

## INTRODUCTION

Investment decision making for an investor is a complex phenomenon in the process of choosing from the various options available. Decision-making theory is based on the concept of satisfaction which can determine the increase or decrease in utility in an effort to increase the satisfaction. Investment decision making by investors is carried out with rational considerations in order to maximize their value, by utilizing financial statements as accounting information (Toma, 2015). Rational investors will conduct analysis in the investment decision-making process. The analysis is carried out with fundamental and technical analysis.

In fact, it is often found that individuals behave irrationally and make systematic errors in decision making such as forecasting errors. Today, financial actors realize that individuals can make irrational decisions. The wrong understanding of the information will affect the investment results which in turn affect the value or wealth owned by investors. This happens when the decisions taken are still heavily influenced by psychological bias (Bulent & Yilmaz, 2015).

In recent decades, several studies have shown that investors often act irrationally and often find phenomena in capital markets and financial markets that contradict traditional financial theories. For this reason, many investors' behavior cannot be explained in the context of traditional financial theory (Ricciardi & Simon, 2000). Recognizing the inability of traditional financial theory to explain anomalies in the phenomenon of money markets and capital markets, financial researchers have begun to relate the existing phenomena to behavioral aspects of finance.

Decision makers have the possibility to take wrong decisions or deviate from estimates. This condition is dangerous because it cannot be seen and is directly related to the thought process. Psychological bias results in prediction errors, because it can make investors wrong in

calculating the risks that can occur. Emotion is an important psychological bias in the process of making decisions that have a high level of uncertainty. When the investor's emotions show good mood, the decision making will be good and right, on the contrary when the investor is in a bad mood, the investor cannot make good and correct decisions (Nofsinger, 2010). Another psychological bias is the illusion of control which is described as a belief in the ability to predict or a more satisfying outcome when a person in this case has more involvement in it (Langer & Roth, 1975).

## **LITERATURE REVIEW AND HYPOTHESES**

### **Decision-Making**

For financiers or investors, success or success in investing is dependent on the decisions made by the return to be obtained. Therefore, the dynamics of decision making has been researched and developed into a science that contains theories about decision science or decision making in various types and environments of people's lives. One of these theories later became part of various disciplines such as psychology, management, economics, accounting and sociology (Plous, 1993).

### **Irrational**

In the decision-making process there are two approaches that can be taken, namely rational and irrational. The rational decision-making approach initially developed with a theory called expected utility theory which states that humans make decisions based on consideration of the maximum net benefit value obtained from the decisions taken (Sewell, 2007). This approach is generally used in making economic and financial decisions, where the approach focuses on cost and benefit analysis using statistical and econometric tools. The irrational approach or often referred to as the behavioral approach is the behavioral approach, where this approach is currently being developed in various disciplines such as economics, finance, marketing, accounting, psychology and even sociology (Pulford, 2009).

### **Emotion**

Emotion refers to a distinctive feeling and thought, a biological and psychological state and a set of tendencies to act (Statman, 2014). In making investment decisions, emotions are associated with the bad mood or good mood of an investor which can affect the buying and selling of shares in the capital market. Emotions are an important part of the process of making decisions that have a high level of uncertainty (Nofsinger, 2005). At one time good mood investors can make good and right decisions, on the contrary when in bad mood investors tend not to be able to make good and right decisions. Emotion factors are factors that are outside the rational assumption of viewing information as the basis for decision making in the theory of the efficient market hypothesis (Fama, 1970).

### **Illusions of Control**

Illusion of control can be interpreted as a phenomenon where someone believes that investors seem to be able to control the surrounding environment even though in reality they are not (Langer, 1975). In the past, many investors entrusted their funds to a financial institution, and the decision to place an investment was taken by a professional investment manager. Now investors prefer to make their own decisions based on the interpretations they believe to be correct. The higher the illusion of control, the more frequent or more active investors are in making investment decisions.

The hypothesis in this study is formulated as follows:

*H1: Investor irrational affects investment decision making*

*H2: Emotion affects investment decision making.*

*H3: Illusion of control affects investment decision making*

## RESEARCH METHODS

The population in this study are stock investors in Bali. Sampling was carried out by taking randomly 20 investors from 5 investment galleries in Bali, so that the total sample was 100 investors. A source of data used in this study is primary data, namely data obtained directly from respondents. This research was conducted in 2020 using primary data through an online questionnaire to obtain respondents' perceptions. In making the questionnaire used a Likert scaling technique. The answer to each statement given will be given a score ranging from the largest of 5 to 1.

The variables in this analysis can be identified as follows (Sugiyono, 2019):

- 1) The independent variable is a variable that is influenced by other variables in a model. The independent variables in this study are irrational, emotion, and illusion of control
- 2) The dependent variable is a variable that is influenced by other variables in a model. The dependent variable in this study is investor decision making

## RESULTS AND DISCUSSION

Statistical analysis is used to provide an overview of a data seen from the minimum, maximum, mean, and standard deviation. In this study, using irrational, emotion, and illusion of control variables on investment decision making will be tested descriptively as shown in Table 1:

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Dev.</b>
X1	100	9	17	12.76	1.421
X2	100	13	32	22.84	3.583
X3	100	14	30	24.05	3.754
Y	100	10	18	15.62	1.816

Source: SPSS Processing Results

Table 1 explains that the irrational variable has a minimum value of 9 and a maximum of 15 and an average value (mean) of 12.76 with a standard deviation of 1,421, emotion has a minimum value of 13 and a maximum of 32 and an average value of 22.84 with a standard deviation of 3,583, illusions of control has a minimum value of 14 and a maximum of 30 and an average value of 24.05 with a standard deviation of 3,754, investment decision making has a minimum value of 10 and a maximum of 18 and an average value of 15.62 with a standard deviation of 1.816.

### Validity Test

This test is carried out by comparing  $r$  arithmetic with  $r$  table (product moment table with a significant 0.05) for degree of freedom ( $df$ )= $n-2$ , a questionnaire is declared valid if  $r$  count  $>$   $r$  table (Ghozali, 2018). If  $r$  count is greater than  $r$  table and is positive, then the statement or indicator item is declared valid. All statement items consisting of each variable can be declared valid

because r count is greater than r table, thus all statement items can be used to measure data accurately.

### Reliability Test

Based on the results of the reliability test in this study, using the Cronbach Alpha statistical test, the measurement guideline is if the alpha coefficient value is above 0.6, it is declared reliable (Ghozali, 2018). The irrational variable has a Cronbach alpha value of 0.736. The emotion control variable has a Cronbach Alpha value of 0.745, the illusions of control variable has a Cronbach Alpha value of 0.814, the illusions of control variable has a Cronbach Alpha 0.798, the investment decision-making variable has a Cronbach Alpha value of 0.802. Because the Cronbach Alpha value is above 0.6, then all variables are declared reliable.

### Data Analysis

To determine the effect of irrational, emotion and illusions of control on investment decision making, SPSS Version 25.0 analysis tool is used. The recapitulation of the results of the analysis with the SPSS program is shown in Table 2 below.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. (constant)	0.476	0.358		1.273	0.208
X1	-0.513	0.284	0.328	1.806	0.046
X2	-0.352	0.106	0.334	3.321	0.001
X3	-0.915	0.262	0.787	3.496	0.000
R=0.794 R <sup>2</sup> =0.630					

Source: SPSS Processing Results

Based on Table 2, it will be possible to present the multiple linear regression equation as follows:

$$Y=0.476 - 0.513X1 - 0.352X2 - 0.915X3$$

Based on the results of the regression equation above, then:

(1) The value of the coefficient X1=-0.513, while X2 is constant, indicating that if investor irrational (X1) is increased by one unit, investment decision making (Y) will decrease by 0.513 units. This means that investor irrational (X1) has a negative effect on investment decision making (Y). This can be interpreted that the higher the investor's irrational, the lower the investment decision-making ability.

(2) The value of the coefficient of X2=-0.352, while X1 is constant, indicating that if investors' emotions (X2) are increased by one unit, investment decision making (Y) will decrease by 0.352 units. This means that investors' emotions (X1) have a negative effect on investment decision making (Y). This can be interpreted that the higher the investor's emotion, the lower the investment decision-making ability.

(3) The coefficient value of X3=-0.915, while X3 is constant, indicates that if illusions of control (X3) are increased by one unit, investment decision making (Y) will decrease by 0.915 units. This means that illusions of control (X3) have a negative effect on investment decision making

(Y). This can be interpreted that the higher the illusion of control, the lower the investment decision-making ability.

Determination analysis is used to find out how much variation in the relationship between the independent variables (investor irrational, investor emotions and illusions of control) and the dependent variable (investment decision making). Based on Table 2, it can be seen that the value of  $R^2=0.794$ , then the value of  $D=0.630 \times 100\%=63.0\%$ . This means that the independent variables (investor irrational, investor emotions and illusions of control) are able to explain investors' investment decision making by 63.0% while the remaining 27.0% (100%-63.0%) is explained by other variables not included in this research model.

The t-test was used to determine the level of significance of the partial effect between the independent variables (investors irrational, investor emotions and illusions of control) and the dependent variable (investment decision making). Based on Table 2, it can be seen that the value of sig t (X1)=0.046 and sig t (X2)=0.001 and sig t (X3)=0.000, where the three values are smaller than (0.05), so  $H_0$  is rejected. This means that partially the investor irrational variable (X1), investor emotion variable and illusions of control variable (X3) have a significant effect on investment decision making (Y).

## RESEARCH DISCUSSION

Based on the results of data analysis, a discussion of the research results is carried out as follows:

Hypothesis 1 states that investor irrational affects investment decision making in the Indonesian Capital Market. Based on the results of multiple linear regression analysis, it is known that the irrational of investors has a regression coefficient value with a negative sign of -0.513 and the t test results obtained a significance level of 0.046. Thus, it is concluded that investor irrational has a negative and significant effect on investment decision making in the Indonesian Capital Market.

The results of this study are in accordance with the results of research conducted by Lakshmi & Minimol (2016); Trehan & Sinha (2016), stating that investor irrational has a negative and significant effect on investment decision making. Investor irrational is an investor's assessment of himself. This assessment can be positive or negative. Investors who are able to evaluate themselves positively will lead to self-confidence in their abilities, dare to make decisions with careful calculations, otherwise investors who judge themselves negatively will cause low self-esteem, anxiety and doubt in decision making. Of course, this situation will affect the increase or decrease in investment decision making. The results of this study indicate that the higher the irrational of an investor, in this case the investor sees himself as more negative, the investment decision making will decrease.

Hypothesis 2 states that investors' emotions affect investment decision making in the Indonesian Capital Market. Based on the results of multiple linear regression analysis, it is known that investors' emotions have a regression coefficient value with a negative sign of -0.352 and the results of the t-test obtained a significance level of 0.001. Thus, it is concluded that investors' emotions have a negative and significant effect on investment decision making in the Indonesian Capital Market.

The results of this study are in accordance with the results of research conducted by Sheikh & Riaz (2012); Khan et al., (2017); which states that investors' emotions have a negative and significant effect on investment decision making. Investor emotion is the belief of each investor in dealing with and solving the problems he faces in various situations and being able to determine actions in certain problems, so that each investor is able to overcome obstacles and achieve the expected goals. Investors who have confidence in being able to solve the problems they face will of course be able to also improve their decision-making abilities, on the other hand investors who are not able to solve the problems they face will reduce their decision-

making abilities. The results of this study indicate that the higher the emotion of an investor, the more unable to solve the problems at hand, the investment decision making will decrease.

Hypothesis 3 states that illusions of control affect investment decision making in the Indonesian Capital Market. Based on the results of multiple linear regression analysis, it is known that the performance of illusions of control has a regression coefficient value with a negative sign of -0.915 and the t test results obtained a significance level of 0.000. Thus, it is concluded that illusions of control have a negative and significant effect on investment decision making in the Indonesian Capital Market.

The results of this study are in accordance with the results of research conducted by Hoffmann et al., (2013); Im & Oh (2016), stated that illusions of control have a negative and significant effect on investment decision making. An illusion of control believes that investors seem to be able to control the surrounding environment even though in reality they are not. Currently, investors prefer to make their own decisions based on the interpretations they believe to be correct. The results of this study indicate that the higher the illusions of control an investor is, the less able they are to take an active role, so that investment decision making will decrease.

## CONCLUSIONS AND SUGGESTIONS

### Conclusion

Based on the results and discussion of the research, the following conclusions can be drawn:

- 1) Investor irrational has a negative and significant impact on investment decision making in the Indonesian Capital Market.
- 2) Investor emotions have a negative and significant effect on investment decision making in the Indonesian Capital Market.
- 3) Illusions of control have a negative and significant effect on investment decision making in the Indonesian Capital Market.

### Suggestion

The suggestions that can be put forward in this research are:

1. The results showed that the three independent variables had a negative and significant effect on the dependent variable, so investors in the Indonesian Capital Market should pay attention to investor irrational, investor emotions and investor illusions of control. Even if there is an increase in investor irrational, emotions and illusions of control, it is still in a controlled corridor.
2. The results of this study can be used by subsequent researchers to add other variables related to investor self-motivation in improving investment decision making.

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