THE IMPACT OF ILLUSION OF CONTROL, OVERCONVIDENCE AND EMOTIONS ON INVESTMENT DECISIONS MADE BY YOUNG INVESTORS IN THE CITY OF MAKASSAR

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ABSTRACT

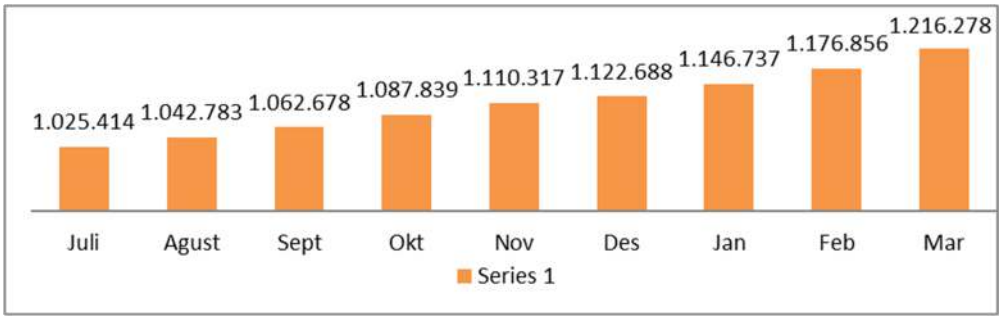
Young investors are unique in terms of making investment decisions. This study aims to examine the impact of illusion of control, overconvidence and emotion on investment decisions made by young investors in the city of Makassar. Using quantitative method, 114 investors are available as participants to answer the questionnaire of this research. The sampling technique used is accidental sampling. The results of the study show that Illusion of Control partially has a positive and significant impact on investment decisions. Overconvidence partially has a positive and significant impact on investment decisions. Emotions partially have a positive and significant impact also on investment decisions. Simultaneously illusion of control, overconvidence and emotion have a positive and significant effect on investment decisions. The findings of this study show that young investors in the city of Makassar involve psychological bias in making investment decisions.

Keywords: Illusion of Control, Overconfidence, Emotions, Investment Decision

INTRODUCTION

The capital market has become an attractive investment destination for investors both from within the country and abroad. The higher the investor's interest in investing in the capital market, the sales and purchasing activities in the capital market are increasing which gives an indication that business activities as a company are going well (Pradikasari and Yuyun, 2018).The rapid growth of the capital market in Indonesia is evidenced by the increasing number of individual investors per March 2018, which are 1,216,278. The figure below shows an increase in the number of Single Investor Indentification (SID) or individual investors in the Indonesian capital market from July 2017 to March 2018. The number of SIDs increased by 27% from 1,025,414 investors in July 2017 to 1,216,278 investors on the month March 2018.

Figure 1. Increase in Number of Single Investor Identification (SID) in Indonesia from 2017 to 2018



Source: KSEI, 2018

The increase in the number of individual investors was accompanied by an increase in the Composite Stock Price Index (CSPI). Based on data from KSEI (2018), the increase in the number of the Composite Stock Price Index (CSPI) in 2018 was 56.48% compared to 2017 at 51.47%. From these data, it can be concluded that investment activities in Indonesia have increased. Investment, especially stock trading, is increasingly popular in the Indonesian community, especially among students. This statement is evidenced by the presence of investment galleries from various college securities that encourage students to invest, where most of them make shares as an investment choice , because the requirements are easy and capital is not large enough (Supramo and Marisa, 2017). But in addition to this convenience , the company's shares go public as an investment commodity classified as high risk, because it is sensitive to changes that occur both from influences from foreign or domestic sources such as political, economic, monetary and so on (Sustainable and Wahyu, 2014).

Increasing investment activity is definitely related to the decision making by investors. An investment decision is an action or policy taken in investing in an asset in the hope of producing a favorable return in the future (Pradikasari and Yuyun, 2018; Rakhimsyah, 2011; Wulandari and Iramani, 2014). In general, the main goal of someone investing is nothing but maximizing utility to increase their satisfaction (Josepth, 2015; Riaz, 2015).

Investment in the capital market is an activity that contains considerable uncertainty, so that it has the potential to create diverse investor behavior. Investors in the capital market often show irrational behavior by taking judgment that is far from deviating from the assumption of rationality (Lestari and Wahyu, 2014) . Some cases show that investors can at any time act irrationally and make systematic mistakes in their forecasting. Financial actors then realize that individuals can make irrational decisions. In Nofsinger's (2015) study, it was reminiscent of the possibility of psychological factors that made investors behave irrationally which could cause bias in stock transactions. In fact, various parties stated that psychological factors from investors have the biggest role in investing. One example is the existence of bounded rationality in investing (Surjana, 2016).

Decision makers in this case allow investors that decisions made at any time can be wrong or deviated. This condition endangers investors because it cannot be seen and is directly related to the thought process. Bias tends to result in investors being wrong in repaying and mistakenly calculating risks that can occur. According to Agustin and Imron (2014) there are various psychological biases that influence investors in decision making including over- evidence, emotion, representativeness, lost aversion, anchoring , pride and regret and many other factors. However, this study will focus on illusion of control, over-evidence and emotion as a bias that influences investor decisions in dealing in the capital market, especially for students who are in the city of Makassar.

THEORETICAL BACKGROUND

A. Bounded Rationality Theory

Bounded rationality theory first proposed by Simon (1975), subtansi theory of bounded rationality is human limitations in managing information and decide a course of action in the face of a problem, because man is the decision maker. As the originator of the concept of bounded rationality, Simon (1975) describes the ability of human thinking in formulating and solving a very minimal compared to the magnitude of the problems encountered (Umaya, 2014).

B. Prospect Theory

Prospect theory was first put forward by Kahneman and Tversky (1979), prospect theory is a theory about the return of decisions made by humans whose results are uncertain in a situation (Kahneman and Tversky, 1979). Prospect theory asserts that a person does not always act in accordance with the standard financial theory under risk and certainty, one adds psychological factors and erratic behavior to rational choice.

C. Investation Decision

An investment decision is an action or policy taken in investing in an asset in the hope of producing a favorable return in the future (Aprilia, et. Al, 2016; Pradikasari and Yuyun, 2018; Rakhimsyah, 2011; Wulandari and Iramani, 2014).

D. Illusion of Control

Illusion of control is described as a belief that is too high in terms of the ability to predict an outcome but in reality is not (Hsu and Hsu Sheng, 2017; Joseph, 2015; Kartini and Nuris, 2015; Pradikasari, 2018; Riaz, 2015; Sarimatua, 2017) .

E. Overconvidence

Overconfidence is an aspect of bias that affects someone in making investment decisions. Overconfidence is a feeling of overconfidence in the ability or knowledge possessed in conducting trade or investment (Kansal and Seema, 2017).

F. Emotion

Emotion or emotion in theory is an important part of the decision making process, especially for decisions that have a high level of uncertainty (Kartini and Nuris, 2015). Emotions have been the main study of psychologists in the last three decades. Experts acknowledge that emotions play an important role in psychological processes such as learning, memory and making decisions. Emotions are not only aimed at setting preferences but also having the power to influence a decision (Umaya, 2014).

METHODOLOGY

This research belongs to associative research using a quantitative approach. Associative research is research that aims to determine the influence of two or more variables (Sugiono, 2008). This research will explain the relationship influencing and influenced by the variables to be studied . The data source itself uses primary data and secondary data. Primary data comes from respondents using a questionnaire (Sugiono, 2008). Secondary data in

the form of data from KSEI 2018. To measure the respondent's response, a scale is used. The scale used inthis study is the Likert scale .

The population used in this study is young investors in the city of Makassar. The sample of this study was accidental sampling with a total of 114 respondents. Data analysis methods used descriptive statistics, data quality tests, classic assumption tests and hypothesis testing with the help of computers through IBM SPSS 24 for Windows. The Multiple Regression Equations are as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

RESULTS

A. Characteristics of Respondents

Table 1. Characteristics of Respondents Based on Age

No.	Age	Total	Percentage (%)
1	17-21	95	83.3
2	22-26	18	15.8
3	27-31	2	1.7
	TOTAL	**114**	**100**

Table 2. Characteristics of Respondents Based on Gender

No.	Gender	Total	Percentage (%)
1	Women	71	62.3
2	Man	43	37.7
	TOTAL	114	100

Table 3. Characteristics of Respondents Based on Marriage Status

No.	Marital status	Total	Percentage (%)
1	Married	1	99.1
2	Single	113	0.9
	TOTAL	114	100

Table 4. Characteristics of Respondents Based on the Study Program

No.	Study program	Total	Percentage
1	Economy	103	90.4%
2	Education	1	0.9%
3	Law	3	2.6%
4	Others	7	6.1%
	TOTAL	114	100%

B. Classical Assumption Test

- **Normality test**

A regression equation is said to pass normality if the significance value of the *Kolmogorov-Smirnov test* is greater than 0 , 05 .

Table 5. Normality Test Results

		Unstandardized Residual
N		114
Normal Parameters [a, b]	Mean	.00 million
	Std.Deviation	3.55919082
Most Extreme Differences	Absolute	.76
	Positive	.052
	Negative	-.076
Test Statistic		.76
Asymp. Sig. (2-tailed)		.113 [c]

Based on table 4.13 shows that the results of the normality test performed indicate that the data are normally distributed. This is indicated by the value of *Asymp Sig.* (2-tailed) which is 0.113> 0.05 so it can be concluded that the data is normally distributed.

- **Multicollinearity Test**

Multicollinearity testing can be seen from the *Tolerance Value* or *Variance Inflation Factor* (VIF), as follows: If the *tolerance* value is > 0 , 10 and VIF <10, then it can be interpreted that there is no multicollinearity in the study.

Table 6. Multicollinearity Test

Model		**Collinearity Statistics**	
		Tolerance	VIF
1	Illution Of Control	.488	2,049
	Overconvidence	.495	2.018
	Emotion	.914	1,094

Source: SPSS 24 Output (2019)

Based on the test results in table 4.14 above, because the VIF value for all variables has a value smaller than 10 and the *tolerance* value is greater than 0.10, it can be concluded that there is no multicolonity between independent variables in the regression model.

- **Heteroscedasticity**

Decision making regarding the existence of heteroscedasticity is if the significance value is more than 0,05 (*probability value* > 0.05), it can be

concluded that the regression model is free from symptoms of heteroscedasticity. The results of heteroscedasticity test in this study can be seen from the following table:

Table 7. Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std.Error	Beta		
1	(Constant)	2,940	1,425		2,062	.42
	Illution Of Control	-104	.80	-.172	-1,300	.196
	Overconvidence	.159	.112	.187	1,422	.158
	Emotion	-.066	.34	-.188	-1,943	.055

Source: SPSS 24 Output (2019)

Based on the results of the *Park* test , it can be seen that the significance values of all variables are above 0 , 05 so that it can be concluded that there is no heteroscedasticity in the two models and has met the classical assumption test.

C. Hypothesis Testing

- **Test F (Simultaneously)**

The results of this F Test calculation can be seen in table 8 below:

Table 8. F Test Results - Simultaneous Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1272,473	3	424,158	32,594	.000 [b]
	Residual	1431,466	110	13,013		
	Total	2703,939	113			

Based on table 8 shows *Illusion of Control, Overconvidence* and Emotion has a F-count value of 32.594 with a significant level of 0.000. The significance level is less than 5% (α = 0 , 05) and the calculated F value of 32.594 is greater than the F table value of 2.69 (df1 = 4-1 = 3 and df2 = 114-4 = 110). This means that it can be concluded that *Illusion of Control, Overconvidence* and Emotion simultaneously influence the Investment Decision.

- **Determinant Coefficient Test (R^2)**

The results of the calculation of the coefficient of determination of this study can be seen in table 9 below:

Table 9. Coefficient Determination ($R^{2)}$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686 [a]	.471	.456	3.60740

The coefficient of determination ($R^{2)}$ aims to determine how much ability of independent variables explain the dependent variable. From table 4.17 it is known that the value of R^{2}(*R Square*) of 0.471. This means that 47, 1%, which indicates that the Investment Decisions influenced by independent variables, *Illusion of Control, Overconvidence* and Emotion. The remaining amount is (100% -47 , 1 % = 52.9%) influenced by other variables that have not been studied in this study.

- **T-test (Partially)**

The t-test is conducted to determine the effect of individual or partially independent variables (*Illusion of Control, Overconvidence* and Emotion) on the dependent variable (Investment Decision), while partially the influence of the three independent variables on Investment Decisions is shown in table 10 below :

Table 10. t-Test

Model		Unstandardized Coefficients		Standardized Coefficient s	T	Sig.
		B	Std.Error	Beta		
1	(Constant)	10.979	2,714		4,046	.000
	Illution Of Control	.560	.152	.366	3.689	.000
	Overconvidence	.481	.213	.223	2.259	.26
	Emotion	.253	.65	.284	3,908	.000

Source: SPSS 24 Output (2019)

Based on table 4.18, multiple regression equations can be arranged as follows:

Investment Decision = 10,979 + 0,560X1 + 0, 481X2 + 0,253X3 + e

The constant value (a) of 10.979 means if the variable *Illusion of Control, Overconvidence* and Emotion is declared constant at zero zero, then the Investment Decision is 10,979. The regression coefficient of the *Illusion of Control* variable is 0.560. Based on table 4.18, it can be seen that the *Illusion of Control* variable has a t-count of 3.689> t table 1.981 df = nk, ie 114-4 = 110 t table 1.981 and a significant level of 0.000 <5% (α = 0 , 05). Thus *Illusion of Control* has a positive effect on Investment Decisions. Then H_1 in this study is *Illusion of Control* has a positive effect on Investment Decisions accepted. *Overconvidence* variable has t-count of

2.259> t table 1.981 df = nk, which is 114-4 = 110 t table 1.981 and a significant level of 0.026 <5% (α = 0.05). Thus *Overconvidence* has a positive effect on Investment Decisions.

Variabel Emotion has t-count of 3.908> t table 1.981 df = nk, which is 114-4 = 110 t table 1.981 and a significant level of 0.000 <5% (α = 0 , 05). Thus Emotion has a positive effect onInvestment Decisions . So H_3 in this study is that Emotion has a positive effect on the Investment Decision received.

DISCUSSION

A. Effects of Illusion of Control on Investment Decisions

This study aims to test the predetermined hypothesis that is testing the effect of illusion of control on investment decisions. Based on the results that have been processed by researchers through the SPSS application , the results of this study find that illusion of control has a positive and significant effect on investment decisions. It can be seen from the results of statistical tests (t test) showing t count values that are greater than the value of t tabe. This indicates that if the Illusion of Control in investors is high, they will increasingly make investmentdecisions , so in this study H1 was accepted.

Based on the regression results show that young investors in the city of Makassar have illusion of control in making investment decisions. Under certain conditions, they often use intuition and have great confidence in determining an outcome. This reinforces the statement from Pradikasari and Yuyun (2018) that investors who have psychological bias tall one itwill often trade . Illusion of control is a belief that is too high in terms of the ability to predict or result but in reality is not (Hsu and Hsu Sheng, 2017; Joseph, 2015; Kartini and Nuris, 2015; Pradikasari, 2018; Riaz, 2015; Sarimatua, 2017) .

B. Effects of Overconvidence on Investment Decisions

The second hypothesis (H 2) which states that Overconvidence has a positive and significant effect on Decisions. The results of this study found that overconfidence has a positive and significant effect on investment decisions can be seen from the results of statistical tests (t test) shows the value of t count greater than the value of t table. This means that if Overconvidencegets higher, investors will make investment decisions more often. hence in this study H2 was accepted.

The regression results are in line with the initial hypothesis of this study, which is that overload has a positive and significant effect on investment decisions. This shows that investors who are overconfident tend to have an optimistic view of the trade done. Over-evidence can also cause investors to take greater risks in making investment decisions. Therefore, people who have high over - evidence tend to see such a risk as low and vice

versa, people who have high overconfidence see the risk as high (Lee-Lee, 2016).

The results of this study are in line with the research conducted by Riaz and Iqbal (2015); Supramono and Marisa (2017); Pradikasi and Yuyun (2018); Dewi and Rr.Iramani (2014);Kansal and Seema (2018); Duxbury (2015); Khan, et. Al (2016); Durand (2013) found results that overload had a positive effect on investment decisions. However, it is different from the results of research from Wulandari and Iramani (2014) which found results that overload did not have a significant effect on investment decisions.

C. Effects of Emotions on Investment Decisions

The third hypothesis (H 3) which states that Emotion positive and significant effect on Investment Decisions. The proof of the hypothesis can be seen from the significant value of the variable obedience pressure smaller than 0 , 05 which has been processed by researchers through the SPSS application . The results of this study found the results of emotions positive and significant effect on investment decisions can be seen from the results of statistical tests (t test) shows the value of t count greater than the value of t table. This means that if emotionsget higher, the more often investors make investment decisions. then in this study H 3 is accepted.

The results of this study are in line with the research conducted by Duxbury (2015); Riaz and Haroon (2015); Nugraha and Kartini (2015) who obtained results that emotion bias had a positive effect on investment decision making . But contrary to the research conducted by Kartini and Nuris (2015) who then obtained the results that emotions negatively affect investment decisions.

D. Effects of Illusion of Control, Overconvidence and Emotions on Investment Decisions

The first hypothesis (H4) which states that Illusion of control, Overconvidence and Emotion simultaneously influence the Investment Decision. Proof of the hypothesis can be from the value of F-count greater than the value of F table as big as can be seen in table 4.18. This means that it can be concluded that Illusion of Control, Overconvidence and Emotion simultaneously influence the Investment Decision. This supports the results of research from DeBondt and Thaler in 1985 related to the study of irrational investors in the capital market which surprisingly found that under certain conditions, irrational investor behavior really exists (Kufepaksi, 2010).

CONCLUSION

This study aims to determine the effect of Illusion of Control, Overconvidence, and Emotions on Investment Decisions. After doing the

hypothesis test , it can be concluded that the Illusion of Control variable has a positive and significant effect on the Investment Decision. Overconvidence has a positive effect on Investment Decisions. V ariabel Emosi has a positive influence on Investment Decisions. This study found simultaneously Illusion of Control, Overconvidence and Emotions influence on investment decisions.

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