Do-Young-Surabayas-Investors-Make-Rational-Investment-Decisions -

by Sri Utami Ady

Do Young Surabaya's Investors Make Rational Investment Decisions?

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Abstract: The purpose of this study was to analyze Financial Literacy, Regret Aversion Overconfidence, and Risk Tolerance against investment decisions of young Surabaya's investor. The approach in this study was (explanatory research) which was a causal approach to finding evidence of a causal relationship through the influence generated between the independent variable and the dependent variable. The method used in this study was a survey method with a quantitative approach with a sample of 63 respondents using multiple linear regression analysis to get a better understanding of the effect of independent variables on the dependent variable. The results of this study indicate that: (1) financial literacy had no significant positive impact on investment decision making. (2) overconfidence had a significant positive effect on investment decision making. (3) regret aversion bias had no significant adverse impact on investment decision making. (4) risk tolerance has no significant positive effect on investment decision making. (5) Simultaneously financial literacy, over-evidence, regret aversion bias, and risk tolerance had a substantial impact on investment decision making.This result confirmed that most of young Surabaya investor was not rasional. Most young investors who may be more unstable in emotions, subsequent research was expected to be more varied. To reduced overconfidence it was better before making an investment decision investors do the right analysis, always update knowledge, update the latest news, and still had a trading plan so that it can reduce overconfidence. Investors should have high confidence, and be rational in making decisions, not just transacting shares due to herding which results in capital market instability.

Keywords: Financial Literacy, Overconfidence, Regret Aversion, Risk Tolerance, investment decisions.

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1 INTRODUCTION

The capital market is one indicator of a country's economic development. The capital market development shows the growing economy of a nation. One of the way to see capital market developments is from the number of investors. The number of capital market investors in Indonesia has less significant growth from year to year. It is because the capital market in Indonesia is still not familiar for everyone to invest. With a population of more than 259 million, only about 1% of these have accounts in the capital market. Based on the number of investors, The Indonesia Stock Exchange reported that as of the end of 2016 187,268 investors were actively transacting in 2016. This figure increased 21.3% from the previous year. The number of active investors in 2016 reflects 35% of the total investors as many as 535,994 investors registered with single investor identification. This number increased by 23.47% of the whole SID at the end of 2015. (https://ekbis.sindonews.com/.../bei-catat-peningkatan-investor-aktif). This development reflects the ongoing efforts of IDX in its efforts to continue increasing the number of individual (retail) investors in the Indonesian capital market. The slow development of the investor's number on the IDX is because there are still many Indonesians, most of whom are Muslim, consider that investing and transacting in the capital market is illegitimate [1][2][3]. In terms of the composition of investors, until 2018, foreign investors still dominate the total IDX investors. It is almost 70% of IDX investors are foreign investors, so they are dominate trading, and local investors become followers of foreign investors . There is a tendency to follow the behavior of most other investors, due to high fears of losses so trading follows the movement of stocks [4]. It is detrimental to local investors and the Indonesian capital market. The crisis that occurred in 1998 in the Indonesian Capital Market was primarily due to the liquidity needs of foreign investors who sold their shares on the IDX due to the economic crisis in their country but responded with massive sales by local investors who followed the behavior of foreign investors, making the JCI dropped sharply. The lack of understanding of local investors in conducting stock analysis makes the decision of local investors irrational, more influenced by psychological factors because of fear and greed.

Various research shows that psychology is critical in making investment decisions. Riset [5][6][7] shows that investors in their decision making are more influenced by psychology, causing their decisions to be irrational, which ultimately is at high risk of getting a loss. Investors who experience hugelosses tend to experience a regret aversion. Regret aversion bias is a regret that arises as a result of suffering an injury so that there is a decision to avoid the same mistakes (Yohnson, 2008) excessive fear of these losses sometimes results in more risky investments. Investors will hold shares in losses for years because they are not willing to realize losses and sell too fast a good stock (winning shares) [8][9]. Knowledge about finance (financial literacy) is believed to reduce the psychological aspects of investors. Investors who understand investment are supposed to be able to mitigate psychological facets and make investors more confident and more rational. The results of the Indonesian national financial literacy survey conducted by the Financial Services Authority (OJK) in 2013 showed that only 21.84% of respondents were categorized as well literate [10]. It means that capital market players in Indonesia are only a few who understand well about the products, concepts, and system of the capital market itself. Several studies on the topics of Financial Literacy, Overconfidence, Regret Aversion Bias and Risk Tolerance show mixed results. In research [11]The high understanding of economics and finance influences investment decisions in the stock market. [12] Expressed the same thing in the findingsthat Financial Literacy had a significant effect on the investment decisions of investors in the UAE. That is confirmed by the results of [14] which states that financial literacy has a significant effect on investor investment decisions. However, this finding is different from research which indicates that a higher level of financial literacy does not necessarily increase investment decisions. In the overconfidence variable, research[13] shows theoverconfidence variable proved to have a significant effect on investment decisions. Expressed the same result in the findings which shows that overconfidence has a significantpositive impact on investment decision making. But this is contrary to the research conducted by [17]that shows the overconfidence variable does not affect investment decisions.

In the regret aversion variable, research of [18], [9], [19] shows

that the Regret Aversion variable bias does not affect on investment decisions. It is different from the results of research conducted by [16], [20] showing that Regret aversion bias affects investment decisions. In research of [21] shows that the Risk Tolerance variable influences investment decisions. It is contrary to the study conducted by [22] that the Risk tolerance variable has no significant effect on Surabaya community investment decision making, which states that the high investor risk tolerance of an investment does not cause these investors to choose the type of high-risk investment even though the investment produces high returns. There are much research links between age and investment decisions. Younger investor tends to have higher risk preference [23], more confidence, and lower regret aversion rates. But the results of research from various countries indicate a contradiction. [24] Show that risk tolerance increases with age,

[25] shows that risk aversion decreases with age which indicates that the older a person is, the more he likes risk. The Existing research does not do specific sampling for young investors. Research on young Indonesian investors, especially in Surabaya, is essential because of the number of young Indonesian investors, the last few years have increased very rapidly, because of the movement to save shares from the IDX, which contains socialization about the tendency to invest in stocks, mainly to universities in Indonesia. Surabaya as one of the second largest cities after Jakarta had a significant effect on the increase in the number of accounts among academician. This research aim was looking at the influence of Financial Literacy, Overconfidence, Regret Aversion Bias and Risk Tolerance on investment decisions of young Surabaya investors.

2. RESEARCH METHOD

This study uses explanatory research, namely a causal approach to look for evidence of a causal relationship through the influence generated between the independent variable and the dependent variable on a particular phenomenon and to determine the nature of the relationship between the independent variables and the effects to be estimated [39]. The method used in this study is a survey method with a quantitative approach. This type of research is chosen considering the objectives include efforts to explain the relationship and the influence that occurs between questionnaires as a primary data collection tool. The analysis technique used to analyze data is regression analysis.

Table 1. Definition, Identification, dan variable indicator.

variable	Definition	indicator	code
Financial Literacy	Financial literacy is a general understanding of management and attitudes about finance. Financial literacy is financial knowledge with the aim of achieving prosperity [12].	1) Knowledge of currency exchange rates. 2) Knowledge of interest rates. 3) Knowledge of investment. 4) Knowledge of debt.	ifl1 ifl2 ifl3 ifl4
Overconfidence	Overconfidence is a belief that not based on one's intuition, adjustment, or cognitive abilities (Pompian, 2006).	1) the accuracy of investment selection. 2) believe in your skills. 3) find in the knowledge they have. 4) investment selection confidence.	io1 io2 io3 io4
Regret Aversion Bias	Regret aversion bias is conditions where investors cannot act decisively due to past mistakes. So that investors always assume that everything is wrong (Pompian, 2006)	1) Experience of losses in investing. 2) Feelings of regret when spending. 3) Impact of loss experience for subsequent investments	irab1 irab2 irab3
Risk Tolerance	the risk is uncertainty that results in the birth of an undesired loss event if the investors ignore the risk tolerance, the planning and implementation can make life uneasy due to risks that are not by the risk profile [38]	1) Willingness to buy high-risk investments to get high profits 2) A desire to purchase investments with debt 3) Advantages are more important than security 4) Do not assume that risk always leads to harm 5) Willingness to provide loans without collateral	irt1 irt2 irt3 irt4 irt5
Keputusan Investasi	Investment decisions are policies on two or more alternative investments in the hope of obtaining profits in the future.	1) Use of a portion of monthly income for investment 2) Investment with consideration 3) Willingness to spend all income on investments that can generate higher returns. 4) Investment based on fast and careful calculations 5) Financing without collateral.	c1 c2 c3 c4 c5

Source: data processed(2018)

The population for this study is all investors in Surabaya. According to According (Sugiyono, 2011:118) the sample is part of the number and characteristics possessed by the population. If the community is large, and researchers are unlikely to learn everything in the people, for example, because of limited funds, energy and time, researchers can use samples taken from the population. The technique of determining sample size divided by into two types, namely for the number of known populations and unknown population numbers. In this study, the number of community divinity so that the determination of the sample size of the population uses a theory developed from [39] to determine the sample size of the people, determined according to the variables or questions used in the study. According to him, the number of samples (respondents) is at least 4 or 5 times the number of variables used in the study. In this study there are five variables, the minimum variable is 25 (5 X 5). Thus, the number of 63 respondents considered as eligible The research used a purposive random sampling technique to select respondents such as the age criterion, length of investment, and also the type of investment owned by respondents. 63 questionnaires can be processed and analyzed, methodologically the number of samples has met the requirements for quantitative analysis. As the theory put forward by [41] argues that the sample size of the population determined according to the variables or questions used in the study. According to him, the number of samples (respondents) is at least 4 or 5 times the number of variables used in the study. In this study there are five variables, then the minimum variable is 25 (5 X 5). Thus, the number of 63 respondents considered as eligible.

3. RESULTS AND DISCUSSION

Data quality testing results

a. Validity test

To test whether the questionnaire that is a valid measurement and has high accuracy. Validity test is done by comparing the r count with r table. Validity test results using the analysis of the moment product analysis shows that the five variables analyzed are valid

Table 3. The result of Validity test of Variable.

Variable	Comparison of r count and r table	decision
Financial Literacy	r count > r table	valid
Overconfidence	r count > r table	valid
Regret Aversion bias	r count > r table	valid
Risk Tolerance	r count > r table	valid
Investment Decision	r count > r table	valid

sources: data processed (2018)

Reliability Test

Reliability test is carried out to find out how far the measurements from the questionnaire remain consistently consistent after repeated times against the subject and in the same conditions. This test is done by comparing Cronbach alpha numbers with r tables. If the alpha value is greater than r table, the questionnaire items used are declared reliable or consistent. Conversely, if the alpha value is smaller than rtable, the questionnaire items used are declared to be unreliable or inconsistent. For r table can see table r with a significance of 5% and df 61 so that the r table value is 0.2480.Df calculation:

$$Df = n - 2$$
$$= 63 - 2$$
$$= 61$$

Table 4. The result of the reliability test of Variables Variable

Variable	r table	Cronbach alpha	Conclusion
Financial Literacy	0,2480	0,348	Reliable
Overconfidence	0,2480	0,735	Reliable
Regret Aversion bias	0,2480	0,753	Reliable
Risk Tolerance	0,2480	0,630	Reliable
Keputusan Investasi	0,2480	0,451	Reliable

Sources: data processed (2018)

Classic Assumption Test

Normality test

The normality test is used to test data that generallydistributed. Data is distributed normally if the significance value is higher than 0.05. And vice versa if the significance value is less than 0.05, the collected information is not normally distributed.

Tabel 5. The result of Normality Test.

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		63
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	2.42724922
Most Extreme Differences	Absolute	.066
	Positive	.066
	Negative	-.043
Kolmogorov-Smirnov Z		.523
Asymp. Sig. (2-tailed)		.947

Sources: data processed (2018)

Based on the output above, find out that the significance value of 0.947 is higher than 0.05 so it concludes that the data used normally distributed.

Multicollinearity Test

Multiculturality test is useful to find out a linear relationship between independent variables; if there is the correlation between independent variables, there is a problem of multicollinearity if the VIF value is higher than 10.00 or by looking at the tolerance value. If the tolerance value is smaller than 0.10, it means that there is a multicollinearity problem.

Table 6. The result of Multikolinerity test.

Variable	Collinearity Statistic		Conclucion
	Tolerance	VIF	
Financial Literacy	0,733	1,365	There is no multicolinerity
Overconfidence	0,713	1,402	There is no multicolinerity
Regret Aversion bias	0,653	1,531	There is no multicolinerity
Risk Tolerance	0,683	1,463	There is no multicolinerity

Sumber : data diolah (2018)

Autocorrelation Test

Autocorrelation test is useful to find out deviate whether a correlation between residuals in one observation and another in the regression model. It mean that there is no deviation if there is no autocorrelation. To find out whether or not there is autocorrelation by comparing the results of Durbin Watson with the DW table. Given the number of samples n = 63 and the number of independent variables k = 4, then the value ofDurbin Watson dL = 1.4607 and dU = 1.7296.

Tabel 7. The result of Autokorelation Test.

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.417[a]	.174	.117	2.50955	1.801

a. Predictors: (Constant), Risk Tolerance, Financial Literacy, Overconfidence, Regret Aversion Bias

b. Dependent Variable: Keputusan Investasi

Sources: data processed (2018)

Based on the output in table 7 it can be seen that the DW result is 1,801 larger than the upper limit dDu, which is 1,7296 and less than (4-dU) = 2,2704 so that it concluded that there is no autocorrelation.

Heteroscedasticity test

The heteroscedasticity test aims to test whether in the regression model there is a residual variance inequality one observation to another observation. To find out whether or not heteroscedasticity occurs by comparing the significance value produced with a significance level of 5%. In this research heteroscedasticity test used Spearman rank analysis asfollows:

Table 8. The Result of Heteroscedasticity test

Correlations

			FL	O	RAB	RT	Unstandardized Residual
Spearman's rho	Financial Literacy	Correlation Coefficient	1.000	.232	.406**	.191	.020
		Sig. (2-tailed)	.	.068	.001	.133	.877
		N	63	63	63	63	63
	Overconvidence	Correlation Coefficient	.232	1.000	.349**	.435**	.028
		Sig. (2-tailed)	.068	.	.005	.000	.826
		N	63	63	63	63	63
	Regret Aaversion Bias	Correlation Coefficient	.406**	.349**	1.000	.359**	.067
		Sig. (2-tailed)	.001	.005	.	.004	.602
		N	63	63	63	63	63
	Risk Tolerance	Correlation Coefficient	.191	.435**	.359**	1.000	.018
		Sig. (2-tailed)	.133	.000	.004	.	.887
		N	63	63	63	63	63
	Unstandardized Residual	Correlation Coefficient	.020	.028	.067	.018	1.000
		Sig. (2-tailed)	.877	.826	.602	.887	.
		N	63	63	63	63	63

**. Correlation is significant at the 0.01 level (2tailed).

Based on the output it is known that the significance value of the three variables is higher than 0.05, meaning there is no heteroscedasticity in all three variables.

4. CONCLUSION

Based on the data obtained and the results of the analysis, conclusions, regarding the influence of Financial Literacy, Overconfidence, Regret Aversion Bias and Risk Tolerance on investment decision making in investors in Surabaya, as flows: 1). Financial Literacy has no significant positive effect on investment decision making. 2). Overconfidence has a significant positive impact on investment decision making. 3). Regret Aversion Bias has no significant adverse impact on investment decision making. 4). Risk Tolerance has no significant positive effect on investment decision making. 5). Financial Literacy, Overconfidence, Regret Aversion Bias and Risk Tolerance simultaneously affect investment decision making. In General, this research confirm that most of Surabaya Young investors was not rational investor.

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