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# The Effect Of Financial Literacy, Overconfidence, And Risk Tolerance On Investment Decision

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ABSTRACT

#### ARTICLE INFORMATION

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*Keywords:* Financial Literacy; Overconfidence; Risk Tolerance; Investment Decision; Gold Investment.

This study aims to test and prove whether financial literacy, overconfidence, and risk tolerance affect investment decisions. The sample in this study were 100 respondents who met the criteria (namely: living in Sidoarjo, aged 20-24 years, owning pure gold as an investment instrument, and making purchases/investments at least once in the last year). This study used multiple linear regression analysis. As a result, it is known that the variables of financial literacy and overconfidence have a significant effect on investment decisions. Meanwhile, the risk tolerance variable has not a significant effect on investment decisions.

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## INTRODUCTION

Economic growth in a country varies widely. A country's economic growth can be measured by comparing the Gross National Product (GNP) and Gross Domestic Product (GDP) in the current year with the previous year. Based on projected data from the World Bank and the International Monetary Fund (IMF), in 2024, Indonesia will occupy the position of the top 5 countries in the world seen from the growth of Gross Domestic Product (GDP) (Santoso, 2020). GDP measures the flow of income and expenditure in the economy over a certain period. The flow of expenditure in the two-sector economy consists of two aggregate components, namely household consumption and investment (Sudirman & Alhudori, 2018).

During the uncertain economic situation caused by Covid 19, people's household consumption continues to increase, especially for household and health products. When the budget for household consumption needs increases, it is right that the budget for investment decreases. However, in a situation like this, public interest in investment is increased.

In the capital market, the number of investors in stocks, bonds, and funds increased by 56%, bringing the number to 3,87 million people as of December 29, 2020, and stocks investors are increased by 53% (Indonesia Stock Exchange, 2020). The Composite Stock Price Index (IHSG) in 2020 has indeed declined, this is may be the reason for many investors to enter the Capital Market.

It is the same with investing in the capital market. Investment in the pure gold sector has also increased. Pegadaian noted that the number of active gold savings customers at the end of 2020 was 5,3 million people, this number grew 36% compared to 2019. The increase in this number is very interesting, given the soaring price of pure gold to reach one million rupiahs. Throughout 2020, Antam noted that the price of pure gold had increased by 38,23% (Mahardhika & Ulfah, 2020).

This condition causes various questions. Are people too confident in investing? Or are they not afraid of the risks?. Moreover, with the increasing public interest in investing, this has been used by an ocnum to commit fraud under the guise of investing. The Commodity Futures Trading Supervisory Agency (Badan Pengawas Perdagangan Berjangka Komoditi) has established a series of illegal investment service provider sites, such as Binomo, Olym Trade, IQ Option, Insta

Forex, Octa FX, and the number will continue to grow (Lidyana, 2020).

One of the factors that affect this condition is the financial literacy possessed by investors. Financial literacy is knowledge, skills, and beliefs that affect attitudes and behavior to improve the quality of decision making and financial management to achieve prosperity (Otoritas Jasa Keuangan, 2019). Financial literacy is a component of human capital that can be used in financial activities to improve financial well-being (Huston, 2010).

Based on the third National Survey of Financial Literacy and Inclusion conducted by the Financial Services Authority (Otoritas Jasa Keuangan Indonesia) in 2019, it shows a financial literacy index of 38,03%. This number is an increase compared to the results of the 2016 survey which showed a financial literacy index of 29,7% and the results of the 2013 survey which showed a financial literacy index of 21,84% (Otoritas Jasa Keuangan, 2019). Meanwhile, the number is increased, but this number still low. This shows that some Indonesians do not yet understand financial literacy.

In addition to the knowledge factor, investment is also affected by psychological factors (Wiryaningtyas, 2016). Because in emotional financial behavior, characteristics, preferences, and other things that exist in humans as social beings are involved in decision making. This study will focus on psychological factors consisting of overconfidence and risk tolerance because both of these are related to financial literacy as a knowledge factor. Overconfidence is a serious mistake in the judgment made by an investor (Jordan & Miller, 2009:249). Overconfidence can affect a person's ability to make investment decisions, causing several consequences, such as being careless in making decisions. Overconfidence, in this case, can cause an investor to bear a greater risk because of his carelessness (Ayu Wulandari & Iramani, 2014).

A rational investor will always consider every decision he makes in investing. What type of investment to choose and how much to invest will affect the investor's tolerance for risk. Tolerance is considered a strong predictor of investment decision making (Bailey & Kinerson, 2005). Based on their tolerance for risk, investors are divided into 3 types, namely, investors who like risk (risk seeker), avoid risk (risk averter), or ignore risk (risk indifference). Differences in risk tolerance will result in differences in investment decision making.

This research will focus on investors aged 20-24 years. Because based on the preliminary survey that was conducted by voting as many as 75 respondents, it is known that 54 respondents (72%) already have an investment, and 46 of them (85%) are aged 20-24 years. For the convenience of research, sampling will be carried out in Sidoarjo, this is also supported by the results of a preliminary survey where 69% of respondents live in Sidoarjo. To achieve clear research results, this study will focus on gold investment, because this kind of investment has a large number of investors in this uncertain condition, it is caused the public's interest to buy, save, and invest their funds in gold are increased.

Based on this background description, authors are interested in researching financial behavior, particularly with investment decisions. Therefore, the authors will research with the title "The Effect of Financial Literacy, Overconfidence, and Risk Tolerance on Investment Decisions".

# LITERATURE REVIEW

#### **Basic Concepts**

### a. Theory of Planned Behavior

Theory of Planned Behavior (TPB) is an extension of Theory of Reasoned Action (TRA). This theory is widely used in examining a person's desire or motive for taking certain actions or vice versa. The theory of planned behavior explains that motive for behavior is an important subject in an action, however, it is necessary to consider one's attitude in testing subjective norms and measuring perceived behavior control (Seni & Ratnadi, 2017).

Theory of Planned Behavior also assumes that a person's behavior is not only controlled by himself but also requires control, namely the availability of certain resources, opportunities, and skills. The availability of resources in this study is financial literacy, overconfidence, and risk tolerance. This theory will show whether these three resources will affect an investor's investment decision.

### b. Theory of Financial Behavior

Financial behavior theory is the study of how humans behave in making financial decisions (Arianti, 2018). Financial behavior is an approach that explains how humans carry out activities related to finance are affected by psychological factors.

Financial behavior is also considered an approach that explains how humans make investments which are affected by psychological factors (Wiryaningtyas, 2016). Financial behavior grows from various assumptions and ideas of economic behavior. Financial behavior also involves emotions, traits, preferences, and other things that exist in humans as social beings to make decisions in taking action.

### c. Investment Decision

Dewi Ayu and Rr. Iramani (2014) argues that investment decision making is a policy taken to invest a certain amount of money in one or more assets that will generate profits in the future.

### d. Financial Literacy

Financial literacy is the level of knowledge, skills, and public confidence regarding financial institutions and their products and services as outlined in the index measurement parameters (Otoritas Jasa Keuangan, 2019).

### e. Overconfidence

Overconfidence or excess confidence is a person's tendency to give priority to their knowledge. abilities. accuracy. and An overconfidence person becomes optimistic about the future and they think they will be able to control it (Ackert & Deaves, 2010:106). Overconfidence is a serious mistake in the judgment made by an (Jordan & Miller. 2009:249). investor Overconfidence can affect a person's ability to make investment decisions, causing several consequences, such as being careless in making decisions, this caused an investor to bear a greater risk because of his carelessness (Ayu Wulandari & Iramani, 2014). Overconfidence will make an investor overly acknowledge their knowledge or abilities and underestimate the predictions made by investors (Chen et al., 2007:10). Overconfidence also affects the behavior of an investor in taking risks, while rational investors will try to maximize profits and minimize the amount of risk taken (Chen et al., 2007:15).

### f. Risk Tolerance

Risk in investment activities is the level of possibility of loss that occurs as a result of getting results that are not as expected when investing (Fahmi, 2013). Risk tolerance is defined as the ability and capacity of an investor to accept and face risks when investing (Budiarto & Susanti, 2017). Risk tolerance shows the level of an individual's willingness to tolerate risk from investment decisions made (Bahri, 2018). Every investor has a different tolerance level. Financial risk tolerance is not only affected by personal characteristics but also conditional factors that encourage risk tolerance to change over time (Nguyen et al., 2016).

Every time an investor decides to invest, he will try to reduce the various possible risks that occur, for risks that are short-term or those that are long-term in nature. Changes that occur in micro and macro-scale economic situations will help shape various situations that make an investor make decisions that need to be done as well as the strategies that need to be used so that he can still get returns that are in line with expectations (Fahmi, 2013).

# Framework of Thinking



Picture 1. The framework of Thinking, source: authors.

# Hypothesis

# H1: Financial literacy has an effect on investment decisions.

Zidni Mubarok in his research examines the effect of financial literacy on investment decisions in the capital market for visitors to the Universitas Airlangga investment gallery and shows the results that financial literacy has a significant effect on investment decision making for visitors to the investment gallery at Airlangga University (Mubarok, 2015).

This is also supported by Nidyayu Anggirani in his research examining the effect of financial literacy on investment decision making in the Surabaya community and shows the results that financial literacy partially has a significant effect on investment decision making for the people of Surabaya (Anggirani, 2017).

In addition, financial literacy also has a positive effect on investment decision making in management master students at Andalas University, investment decisions for Batam residents, making investment decisions at productive age in Bandung City, and investment decisions for accounting students at Pancasila University (Dewi & Krisnawati, 2020; Hikmah et al., 2020; Mandagie et al., 2020; Putri & Hamidi, 2019).

# H2: Overconfidence has an effect on investment decisions.

Ni Putu Asri Pratiwi in his research examines the effect of overconfidence on investment decisions of the Sidoarjo community, showing the results that overconfidence has a significant effect on investment decisions of the Sidoarjo people, most of whom invest in real assets (Pratiwi, 2016).

This is supported by Nindyayu Anggirani in his research examining the effect of overconfidence on investment decision making in the Surabaya community and shows that overconfidence partially has a significant effect on investment decision making for the Surabaya community (Anggirani, 2017).

Similar results were also obtained by Ni Putu Priscillia Kartika Dewi and Astrie Krisnawati who tested the effect of overconfidence on investment decision making at productive age in Bandung City (Dewi & Krisnawati, 2020).

# H3: Risk tolerance has an effect on investment decisions.

Dewi Ayu and RR. Iramani in his research examined the effect of risk tolerance on investment decision making for economics lecturers in Surabaya and showed that risk tolerance has a significant effect on investment decision making for economics lecturers in Surabaya (Ayu Wulandari & Iramani, 2014). This is also supported by M. Saiful Bahri in his research which examines the effect of risk tolerance on investor investment decisions in Surabaya and shows the results that risk tolerance has a significant effect on investor investment decisions in Surabaya (Bahri, 2018).

In addition, several other researchers also showed that risk tolerance affects investment decisions of Batam residents, investment decision making at productive age in Bandung City, investment decisions of accounting students at Pancasila University (Dewi & Krisnawati, 2020; Hikmah et al., 2020; Mandagie et al., 2020).

#### METHOD

This research used quantitative methods. The population in this study were Sidoarjo residents aged 20-24 years. Samples were taken using 3 purposive techniques, namely: sampling, convenience sampling, and snowball sampling. The author takes a sample of respondents who fit the criteria (namely: living in Sidoarjo, aged 20-24 years, owning pure gold as an investment instrument, making purchase transactions with investment objectives at least 1 time in the last year) and are willing to participate, so that they are easy to contact. Furthermore, the authors ask for help, so that respondents who have participated in distributing questionnaires to their communities get more respondents. The sample used was 100 respondents. Furthermore, the data is processed using the help of IBM SPSS version 26 software.

The four variables in this study were measured using a Likert scale (Sugiyono, 2018:147), namely: 1 (strongly disagree); 2 (disagree); 3 (neutral / indecisive); 4 (agree); 5 (totally agree). Furthermore, the data quality test was carried out which consisted of validity and reliability tests on the data that had been collected through google forms. The validity of the statements in the questionnaire was analyzed using a significance level of 0,05. While the reliability test was analyzed using the Cronbach Alpa technique which measured the level of 0,6. After that, it was continued with the classic assumption test including of normality test, multicollinearity test, and heteroscedasticity test. Then a multiple linear regression analysis tests were carried out which was equipped with the t-test, the F test, and the coefficient of determination test to test the research hypothesis.

### **RESULT AND DISCUSSION Data Analysis**

# a. Summary of the Characteristics of the Respondents and Descriptive Statistic

The object of this research is the Sidoarjo people aged 20-24 years, owning gold as an investment instrument, and conducting purchase/saving transactions at least once in the past year. The number of respondents obtained was 106 respondents, then reduced by 6 respondents due to non-conformity with the criteria, so that the data used in the sample was 100 respondents.

The description of the research data will present a summary of the characteristics of the respondents and the results of the statistical descriptions of the research that has been carried out. The summary of the characteristics of the respondents are shown in table 1 below:

No	<b>Respondent's Characteristics</b>	Amount
	Gender:	
1	Male	17
	Female	83
	Revenue:	
	< 1.000.000	35
	> 1.000.000 - 2.000.000	19
2	> 2.000.000 - 3.000.000	10
	> 3.000.000 - 4.000.000	14
	> 4.000.000 - 5.000.000	9
	> 5.000.000	13
	Revenue's Source:	
2	Salary	53
3	Parents	38
	Other	9
	Investment Frequency:	
4	1-2 times	89
4	3-5 times	9
	> 5 times	2

 Table 1. Summary of the Characteristics of the Respondents, source: primary data.

Based on table 1, it can be seen that there are more female investors than male investors. In terms of income, the largest number is investors with an income level of < 1.000.000 while the least number is investors with an income level of > 4.000.000to 5.000.000. The sources of income for the majority of investors are salaries, pocket money from parents, and others. Based on the frequency of investing, the majority of investors make 1-2 routine transactions every month.

 Table 2. Descriptive Statistic of the Research, source:

 primary data.

Descriptive Statistic					
	Ν	Min	Max	Mean	Std.
					Deviation
FL	100	33	55	43,67	4,671
0	100	7	20	13,66	2,965
RT	100	13	40	22,97	4,890
ID	100	17	35	26,83	3,859

Based on table 2, it can be seen that the amount of data used as a sample is 100. The explanation of table 2 is as follows:

- a. The minimum value indicates the smallest value contained in each variable under study. The financial literacy variable has a minimum value of 33, overconfidence has a minimum value of 7, risk tolerance has a minimum value of 13, and investment decisions have a minimum value of 17.
- b. The maximum value shows the greatest value contained in each variable under study. The financial literacy variable has the maximum value of 55, overconfidence has the maximum value of 20, risk tolerance has the maximum value of 40, and investment decisions have a maximum value of 35.
- c. The mean value shows the average value contained in each variable under study. The financial literacy variable has the mean value of 43,67, overconfidence has the mean value of 13,66, risk tolerance has the mean value of 22,97, and investment decisions have the mean value of 26,83.
- d. The standard deviation represents the statistical value used to show the distribution of data in the sample. The financial literacy variable has a standard deviation value of 4,671, overconfidence has a standard deviation value of 2,965, risk tolerance has a standard deviation value of 4,890, and investment decisions have a standard deviation value of 3,859.

#### b. Data Quality Test (Validity and Reliability)

The data quality test was carried out in two stages, namely the validity test and the reliability test. The validity test is used to measure whether a questionnaire is valid or not (Ghozali, 2016:52). A questionnaire is said to be valid if the questions on the questionnaire can reveal something that will be measured by the questionnaire. From the results of the calculation of the correlation will be obtained a correlation coefficient is used to measure the level of validity of an item and to determine whether an item is suitable for use or not. In determining the feasibility of an item to be used, a significance test for the correlation coefficient is usually carried out at the 0,05 or 5% significance level, meaning that an item is considered valid if it is significantly correlated with the total score.

While the reliability test aims to measure the indicators of the variables contained in a questionnaire (Ghozali, 2016:48). The reliability of a test refers to the degree of stability, consistency, predictive power, and accuracy. Measurements that

have high reliability are measurements that can produce reliable data. High or low reliability is empirically indicated by a number called the reliability coefficient value. A reliability test is a test to measure reliability with Cronbach Alpha. A variable can be said to be reliable if the results are  $\alpha \ge 0,60$ . Conversely, if  $\alpha \le 0,60$  then the variable is said to be unreliable. A summary of the results of the validity and reliability tests in this study is presented in table 3.

 Table 3. Summary of Normality and Reliability Test,

 source: primary data.

<b>T</b> 7	Stat	Validity Results		<b>Reliability Results</b>	
var	Items	Correlate	Result	α	Result
FL	X1.1	0,510	Valid	0,708	Reliable
	X1.2	0,566	Valid		
	X1.3	0,399	Valid		
	X1.4	0,355	Valid		
	X1.5	0,516	Valid		
	X1.6	0,546	Valid		
	X1.7	0,560	Valid		
	X1.8	0,481	Valid		
	X1.9	0,464	Valid		
	X1.10	0,600	Valid		
	X1.11	0,558	Valid		
0	X2.1	0,854	Valid	0,880	Reliable
	X2.2	0,901	Valid		
	X2.3	0,907	Valid		
	X2.4	0,790	Valid		
RT	X3.1	0,549	Valid	0,761	Reliable
	X3.2	0,609	Valid		
	X3.3	0,477	Valid		
	X3.4	0,542	Valid		
	X3.5	0,518	Valid		
	X3.6	0,776	Valid		
	X3.7	0,735	Valid		
	X3.8	0,678	Valid		
ID	Y1	0,541	Valid	0,846	Reliable
	Y2	0,798	Valid		
	Y3	0,709	Valid		
	Y4	0,781	Valid		
	Y5	0,848	Valid		
	Y6	0,714	Valid		
	Y7	0,667	Valid		

Based on table 3, it is known that all statement items in the questionnaire are declared valid (correlation > 0,05) and reliable ( $\alpha > 0,60$ ) so that the next test is carried out.

### c. Classic Assumption Test (Normality, Multicolliniearity, and Heteroscedasticity)

This test is divided into normality test, multicollinearity test, and heteroscedasticity test. The normality test aims to determine whether the data that has been collected has a normal distribution or not (Ghozali, 2016:154). This study used 2 techniques to test the normality of the data, the first used a graph and the second used the one sample Kolmogorov Smirnov test. The results of the normality test are presented in Picture 2 and Table 4 below:



Picture 2. Graphic of Normality Test, source: IBM SPSS.

Table 4. The Result of One Sample Kolmogorov Test,source: IBM SPSS.

One-Sample Kolmogorov-Smirnov Test			
Unstandardized Residual			
Ν	100		
Asymp. Sig. (2-tailed)	0,200 <sup>c,d</sup>		

Based on Picture 2, the dots have spread around the diagonal line and follow the direction of the diagonal line. This means that the data has a normal distribution and has met the assumption of normality. This is supported by the results shown in table 4, the Kolmogorov Smirnov significance value shows the number 0,200 > 0,05 so that the data distribution in this study is proven to be normal.

Furthermore, a multicollinearity test is carried out which aims to test whether in the regression model there is a correlation between independent variables (Ghozali, 2016:103). The test results are presented in Table 5 below.

 Table 5. The Result of Multicolliniearity Test, source: IBM SPSS.

Coefficients				
Model T		Collinearity Statistics		
		Tolerance	VIF	
1	Financial Literacy	0,669	1,494	
	Overconfidence	0,653	1,532	
	Risk Tolerance	0,933	1,071	

Based on table 5, it can be seen that the data in this study do not show multicollinearity, because the financial literacy variable has a tolerance value of 0,669 > 0,1 and VIF 1,494 < 10; overconfidence has a tolerance value of 0,653 > 0,1 and a VIF of 1,532 < 10; and risk tolerance has a tolerance value of 0,933 > 0,1 and a VIF of 1,071 < 10.

Furthermore, the heteroscedasticity test was carried out to determine whether in the regression model there was an inequality of variants from the residuals of one observation to another. A good regression model does not occur heteroscedasticity (Ghozali, 2016:134). The results of heteroscedasticity testing in this study are presented in Picture 3 below.



Picture 3. The Result of Heteroscedasticity Test, *source: IBM SPSS*.

Based on Picture 3, it can be seen that the dots have spread and do not form a certain pattern, so the data in this study are proven to not show symptoms of heteroscedasticity.

#### d. Fit to Model Test

The fit to model test is carried out by performing the F test and the coefficient of determination test. The F test is used to conclude whether the independent/independent variables used are suitable or not. Meanwhile, the coefficient of determination test aims to measure the ability of the research model in explaining the dependent variable. A summary of the model feasibility test results is presented in Table 6 below.

51 55.		
F test		Coefficient of
		<b>Determination Test</b>
F	Sig	
30,662	0,000	0,473

Table 6. Summary of Fit to Model Test, source: IBMSPSS.

Based on table 6, it can be seen that the significance value is 0,000 < 0,05. So, it can be concluded that the regression model in this study is good or feasible to do. Meanwhile, the coefficient of determination test results shows that 47,3% of investment decisions are influenced by financial literacy, overconfidence, and risk tolerance. As well as the other 52,7%, can be influenced by other variables that are not used in this study.

### e. Regression Analysis and Hypothesis Test

This study used multiple linear regression analysis to determine the effect of financial literacy, overconfidence, and risk tolerance on investment decisions. A summary of the results of the t-test (hypothesis test) is presented in Table 7 below.

Table 7. Summary of Fit to Model Test, source: IBMSPSS.

Var	Unstd	t table	Result of	t-Test
	В		t count	Sig
(constant)	5,404			
FL	0,293	1,985	3,974	0,000
0	0,530	1,985	4,514	0,000
RT	0,061	1,985	1,024	0,308

Based on the results obtained in table 7, the equation model of multiple linear regression can be obtained as follows:

Y = 5,404 + 0,293 LK + 0,530 O + 0,061 TR + e

Information:

- ID = Investment decision
- FL = Financial literacy
- O = Overconfidence
- RT = Risk tolerance
- e = error

Based on table 7, several things can be seen as follows:

a. Financial literacy has a value of t count 3,974 > t table 1,985 and a significance value of 0,000 < 0,05. This means that financial literacy has a significant effect on investment decisions.</li>

Financial literacy affects as much as 29,3% of investment decisions.

- b. Overconfidence has a value of t count 4,514 > ttable 1,985 and a significance value of 0,000 < 0,05. This means that overconfidence has a significant effect on investment decisions. Overconfidence affects as much as 53% of investment decisions.
- c. Risk tolerance has a value of t count 1,024 < ttable 1,985 and a significance value of 0,308 > 0,05. This means that risk tolerance does not have a significant effect on investment decisions. Risk tolerance only affects as much as 6,1% of investment decisions.

## Discussion

# a. The Effect of Financial Literacy on Investment Decision

Based on the results of statistical tests that have been carried out in this study, it is found that financial literacy has a significant effect on investment decisions in Sidoarjo people (especially pure gold investors aged 20-24 years). Financial literacy has quite a lot of influence on investment decisions, amounting to 29,3%.

Based on the results of the statistical description test, financial literacy has a mean value of 43,67%. According to Chen and Volpe (1998), the financial literacy scale ranges are divided as follows:

High = if the mean > 79%

Intermediate = if the mean value is 60% - 79%

Low = If the mean < 60%

This means that Sidoarjo residents have a low level of financial literacy on average. This is reasonable considering that the respondents sampled in this study are gold precious metal investors, because according to Zidni Mubarok (2015) when a person's financial literacy level is low, he or she has a tendency not to invest in the capital market. So, the higher a person's level of financial literacy, the more investment decisions he takes will also be different because someone with high financial literacy will think more complexly than someone with low financial literacy.

The results of this study are supported by research conducted by Nidyayu Anggirani in his research which examines the effect of financial literacy on investment decision making in the Surabaya community, which shows that financial literacy has a significant effect on investment decision making for the Surabaya community (Anggirani, 2017). In addition, financial literacy also has a positive effect on investment decision making in management master students at Andalas University, investment decisions for Batam residents, making investment decisions at productive age in Bandung City, and investment decisions for accounting students at Pancasila University (Dewi & Krisnawati, 2020; Hikmah et al., 2020; Mandagie et al., 2020; Putri & Hamidi, 2019).

The results of this study do not support Pratiwi's research which states that financial literacy has no effect on investment decisions in Sidoarjo people (Pratiwi, 2016). The differences in the results of this study can occur for several reasons. First, because of the difference in respondents, wherein his research, Pratiwi used all investors and this study used gold investors only. Second, the possibility of the Sidoarjo people's literacy rate increasing, this is indirectly the impact of the increase in the national financial literacy index in 2016 which shows a figure of 29,7% to 38,03% in 2019 (Otoritas Jasa Keuangan, 2019).

# b. The effect of Overconfidence on Investment Decision

Based on the results of statistical tests that have been carried out in this study, it is found that overconfidence has a significant effect on the investment decisions of the Sidoarjo people (especially pure gold investors aged 20-24 years). Overconfidence has a lot of influence on investment decisions, amounting to 53%. This means that the higher the level of overconfidence a person has, the more courageous he will be in making investment decisions.

The results of this study are supported by research previously conducted by Nindyayu Anggirani (2017) and Dewi & Krisnawati (2020) which shows that overconfidence has a significant effect on investment decision making (Anggirani, 2017; Dewi & Krisnawati, 2020).

However, these results are different from the research conducted by Wulandari & Iramani which shows that overconfidence has a but insignificant effect on investment decisions (Ayu Wulandari & Iramani, 2014). This can happen because overconfidence is a subjective assessment of a person's ability, in this case, making investment decisions. So, it is very natural that overconfidence is different in each study because each user as a respondent in each study also has different perceptions. This is following the theory of financial behavior which states that all actions related to financing also involve emotions, traits, preferences, and other subjective things.

# c. The effect of Risk Tolerance on Investment Decision

Based on the results of statistical tests that have been carried out in this study, it is found that risk tolerance does not have a significant effect on investment decisions of the Sidoarjo people (especially pure gold investors aged 20-24 years). Risk tolerance only affects 6,1% in making investment decisions. However, this shows that risk tolerance has a direct relationship with investment decisions.

These results are different from the research conducted by Dewi Ayu and Iramani (2014) which shows that risk tolerance has a significant effect on investment decision making. However, the results of this study are supported by research conducted by Zidni (2015) and Nidyayu (2017) which shows that risk tolerance has no significant effect on investment decisions.

The risk tolerance theory states that the greater the benefits, the greater the risk an investor has. Lately, fraud cases under the guise of investment have been rampant (Lidyana, 2020). This encourages people to look for other alternatives to gain profits, one of which is by opening a business and the trend is establishing start-ups. This is a natural thing, considering that since the last few years, invitations to entrepreneurship have continued to be made to the younger generation. So that the number of entrepreneurs continues to increase every year. In addition, since the start of the 4.0 industrial revolution in Indonesia in 2011 (Kementerian Perindustrian Republik Indonesia, 2018) has integrated connectivity, interaction, and other resources through information and communication technology, so that various types of start-ups have emerged in their respective fields. Moreover, policies or programs made by the government are also very supportive of this field, such as tax incentive policies for business actors (Direktorat Jenderal Pajak, 2020), the National Movement of 1000 start-ups that have been echoed since 2016 (Kementerian Komunikasi dan Informatika, 2016), Student Creativity Program which aims to cultivate, accommodate, and realize creative and creative student ideas (Direkterot Jenderal Pendidikan

Tinggi, 2021). This is what caused the tendency of Sidoarjo residents aged 20-24 to have a low tendency towards investing in pure gold.

## CONCLUSION

Based on the results of the analysis that has been done, it can be concluded that 1) Financial literacy has a significant effect on investment decisions, 2) Overconfidence has a significant effect on investment decisions, and 3) Risk tolerance has no significant effect on investment decisions.

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