



THE IMPACT OF FINANCIAL LITERACY AND RISK PERCEPTIONS ON INVESTMENT DECISIONS FOR MILLENNIAL GENERATIONS IN THE CITY OF DENPASAR, INDONESIA

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Abstract

The impact of the COVID-19 pandemic which has degraded the economy has made some people lose their jobs as a source of income. However, people can actually earn other income through investment. The decision not to invest their funds is due to poor financial literacy, low income, perception of risk and a consumptive lifestyle. The aim of the study was to examine the effect of financial literacy and risk perception on the investment decisions of the millennial generation in Denpasar City. The research sample was 96 millennial generations in Denpasar City which were selected using purposive sampling. Data collection was carried out by making financial literacy instruments modified from Elvara & Margasari's research (2019), risk perception instruments adapted from Trisnatio & Pustikaningsih research (2017), and investment decision instruments adapted from Rahman & Gan's (2020) research. The analysis technique of this research uses multiple linear regression analysis. The results of the study found that financial literacy and risk perception simultaneously had a significant effect on investment decisions. Testing of each independent variable found that financial literacy had a

significant effect on investment decisions. Another variable, namely risk perception, was also found to have a significant effect on investment decisions.

Keywords: Financial Literacy, Risk Perception, Investment Decision, Millennial Generation, Regression Analysis

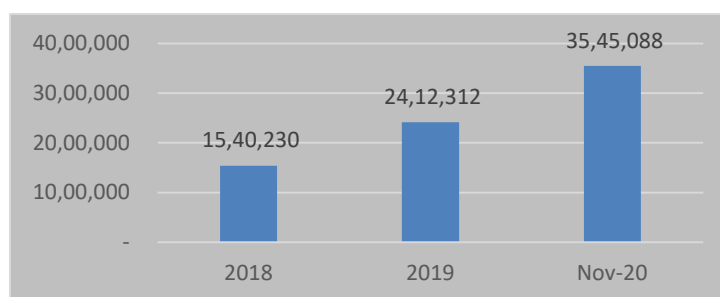
INTRODUCTION

The Covid-19 pandemic, which began in early 2020, has had a huge impact on the world. Many countries in the world are run into recession due to the Covid-19 pandemic. Global economic conditions in 2020 with GDP (Gross Domestic Product) decreased to a minus value in almost all countries. In order to survive the slump economic conditions, according to the IMF (International Monetary Fund), people are expected to "save more in case", reducing consumption due to an uncertain future. In this condition, people who were initially consumptive chose to save their money.

In Indonesia, the impact of this COVID-19 pandemic is an increase in unemployment, from around 4.99% as of February 2020 to 7.07% as of August 2020. People who have income outside their main job will be safer, such as having savings or investments. However, before the pandemic there was an attitude of consumerism that became a habit that made people lack a culture of saving, such as investing (Putri & Rahyuda, 2017).

Not many Indonesians have invested before the pandemic, so many people have difficulty surviving after losing their jobs. People who have lost their jobs or those who are still working have started trying to invest in the midst of a downturn in the economy. Based on data from the financial services authority in Figure 1, there has been an increase in SID (Single Investor Identification) over the last three years include until the pandemic was in 2020, yet the ratio of Indonesian people's involvement in investing in the capital market is still less than 5% compared to the total population of Indonesia.

Figure 1. SID (Single Investor Identification) Increasing Data



Source: Financial Services Authority, 2021 (data processed)

The decision to invest part of their income has not been made by the community so far due to various factors such as poor financial literacy, the income earned is still considered insufficient for investment, assumptions about the risks that must be borne when investing money, to consumptive living habits also make people choose to consume their income rather than to invest.

The increase in the number of investors in Indonesia is one of the results of the government's continuous efforts to educate the public, by increasing public financial literacy. Financial literacy is a set of skills and knowledge that allows an individual to make decisions and be effective with all their financial resources (Manurung, 2009: 24). The existence of skills possessed by a person will be able to influence the investment decisions they will choose. Research from Alaraj & Bakri (2020) states that financial literacy has a significant positive effect on investment decisions. The right investment decisions will make a community's financial condition better.

However, Fitrianti (2018) in her research results found that financial literacy had no significant effect on investment decisions. In addition, based on the results of research from Abdeldayem (2016) found a fairly low relationship between financial literacy and investment decisions.

Every investment decision taken by investors tends to contain risks. The existence of risk will make investors have doubts about the investment to be made. The way investors interpret risk that is different from forecasts and thoughts with reality is called risk perception (Ainia & Lutfi, 2019). Waheed *et al* (2020) found that the perception of risk had a significant positive effect on investment decisions. However, Pradikasari & Isbanah's research (2018) found different results. The risk perception variable has no effect on investment decisions. This shows that respondents are not careful in making investment decisions, investors tend to be brave and not much consideration in making decisions.

Bold decision making and self-confidence are characteristics of the millennial generation. The research was conducted on the millennial generation in the city of Denpasar, namely people born in the early 1980s to the 1990s during the booming internet era so that they were already technologically literate. The millennial generation spends money more often for things that are not really necessary with the aim of supporting a lifestyle (Pratiwi *et al*, 2020). Living in the modern era makes the millennial generation consume almost all of their income to support their lifestyle. Whereas consumptive behavior will lead to irresponsible financial behavior such as lack of saving, investing, planning emergency funds and budgeting funds for the future (Herdjiono and Damanik, 2016).

LITERATURE REVIEW AND HYPOTHESES

Most of the community's income has not been used for investment. Investment is a commitment in financing activities over several future periods in a certain asset (Jones, 2014). According to Tandelilin (2010 : 1), investment is a commitment of a certain amount of money or funds or from other resources that is being carried out at this time, with the aim of making profits in the future. Investment according to Pradikasari & Isbanah (2018) is an activity of putting capital to get good returns in the future.

To be able to get a good return, investors must carefully consider the feasibility of the investment to be made so that investors can make the right decision on the investment. Investment decisions are decisions made by the company in spending funds owned and formed certain assets in the hope of getting profits in the future (Nadhiroh, 2013). To obtain the right investment decisions, investors must have a good level of financial literacy.

Financial literacy is the ability that a person has about finances in general, such as knowledge about saving, investing, debt insurance and other financial instruments (Fitriarianti, 2018: 4). Saputro & Lestari (2019) stated that the higher a person's level of financial literacy, the better they will make investment decisions.

According to Dewi & Purbawangsa (2018), financial literacy has the greatest influence in determining investment decision behavior rather than income. Based on the research of Chen and Volpe (1998) financial literacy has several dimensions: 1) General knowledge of finance 2) Savings and loans 3) Investment 4) Insurance. Every investment made has a different risk that cannot be eliminated. Therefore, the perception of this risk will be able to influence one's investment decisions.

Investor behavior in making investment decisions is affected by investors' subjective assessment of the risks and returns of the investment itself. Better risk perception will lead to better investment decisions as well. In the research of Wulandari & Iramani (2014: 64), it is stated that risk perception influences investment decisions. The more investment products that are considered relatively safe, it will encourage students to invest. Meanwhile, individuals or students who have a low risk perception will be slow in making investment decisions because they think that investment is risky (Saputro & Lestari 2019). Pavlou (2003) in his research said that the perception of risk can be measured by the following indicators: 1) There is a certain risk 2) Experiencing a loss 3) Thinking that it is risky. In this study, risk indicators are seen from how investors respond to the risks that they face when making investments.

Decision making is a process of selecting the best investment alternative from the number of available alternatives (Puspitaningtyas, 2013). Investment decisions by knowing an investor about how and an investor's response may be received when deciding to invest. A

person's view or perception of risk will affect a person's decision whether to invest or not in an investment product. If the investment is considered to have a high enough risk rather than the risk tolerance it has, not investing is the decision that will be taken.

There are a number of indicators to measure investment decisions (Safryani *et al*, 2020):
(1) Rate of Return (2) Risk Return (3) Return & Risk Relationship.

Hypotheses

H₁: Financial literacy and risk perception simultaneously affect investment decisions

H₂: Financial literacy partially affects investment decisions

H₃: Perception of risk partially affects investment decisions

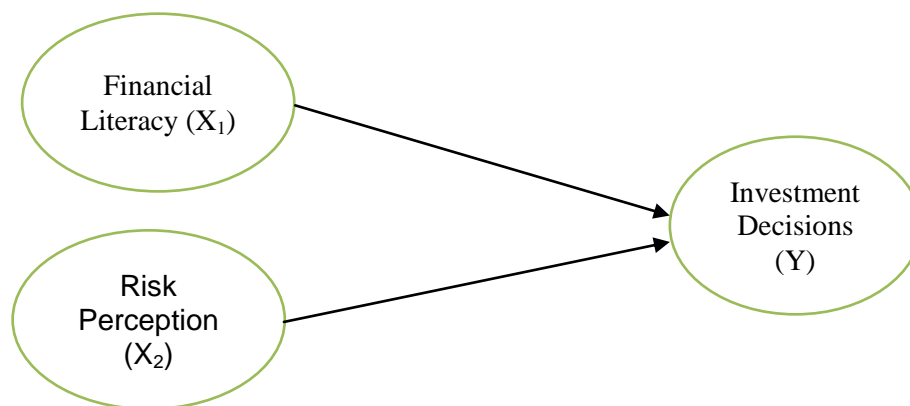


Figure 2. Conceptual Framework

The type of research used is associative research. Associative research is a research method that aims to determine the causal relationship between the variables of a test and a statistical calculation (Sugiyono, 2017). Testing will produce evidence that shows the research hypothesis is rejected or accepted.

The population of this study is the people in the city of Denpasar who is classified to the millennial generation. The number of samples in this study were 96 respondents. This amount is obtained from the formula (Riduwan, 2019: 66):

$$n = \left(\frac{Z_{\alpha} \cdot \sigma}{e} \right)^2$$

$$n = \left(\frac{(1,96 \cdot (0,25))}{0,05} \right)^2 = 96,04 \approx 96$$

The sampling technique used was purposive sampling, namely the sampling was carried out considering certain criteria. The criteria for sample selection include: 1) Residents of Denpasar city who were born from 1981 – 1999 2) Already have a job/income 3) Have been or

are currently investing. Data were collected through a modified financial literacy instrument from the research of Elvara & Margasari (2019), a risk perception instrument adapted from the research of Trisnatio & Pustikaningsih (2017), and an investment decision instrument adapted from the research of Rahman & Gan (2020). The questionnaire was arranged on a Likert scale of 1 to 4, from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

The research analysis technique used multiple linear regression analysis. Multiple linear regression analysis is a development of simple regression analysis (Riduwan, 2019: 155). Multiple linear regression analysis is used to predict the value of the dependent variable (Y) if the independent variable (X) is at least two or more. The data analysis technique used classical assumption test which consisted of normality test, heteroscedasticity test and multicollinearity test. To test the research hypothesis using multiple linear regression and see the value of the coefficient of determination (R^2) to find out how far the independent variable (X) is able to influence the dependent variable (Y).

RESULTS

Based on the test results of 96 samples, using descriptive analysis there were 68.8% women and the remaining 31.2% men who were the samples in this study. Most of the respondents who became the sample were aged from 26 to 27 years as many as 39 people and the rest were spread from the age range of 22 to 34 years.

Classical assumption tests

Before continuing to the research hypothesis test, the classical assumption tests were first tested, namely the normality test, multicollinearity test and heteroscedasticity test.

Table 1. Normality Test

N	96
Asymp. Sig. (2-tailed)	.085 ^c

The data be able said to be normally distributed if the value of Sig. (2-tailed) > 0.05. In this study, based on Table 1 the value of Sig. (2-tailed) is 0.085, which is greater than 0.05, so it can be said that the data is normally distributed.

The second classic assumption test is the multicollinearity test. In the multicollinearity test, the test results on each variable (X1 and X2) must have a tolerance value > 0.1 and a VIF value < 10. Based on the test results in Table 2, the tolerance value for X1 and X2 is 0.975,

which is more than 0.1 and the VIF value X1 and X2 are 1.026, which is less than 10. So there is no multicollinearity symptom in the regression model.

Table 2. Multicollinearity Test

Model		Unstandardized		Standardized	t	Sig.	Collinearity	
		Coefficients		Coefficients			Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.789	2.368		1.177	.242		
	X1	.153	.033	.417	4.563	.000	.975	1.026
	X2	.118	.054	.201	2.194	.031	.975	1.026

The third classic assumption test is heteroscedasticity test. Sig value > 0.05 in order to pass this test.

Table 3. Heteroscedasticity Test

Model		Unstandardized		Standardized	t	Sig.	Collinearity	
		Coefficients		Coefficients			Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-2.436	2.426		-1.004	.318		
	X1	-.004	.034	-.013	-.129	.898	.975	1.026
	X2	.104	.055	.196	1.903	.060	.975	1.026

Table 3 shows the value of Sig. X1 is 0.898 and the value of Sig. X2 is 0.60, which is greater than 0.05, so it can be concluded that there are no symptoms of heteroscedasticity.

HYPOTHESES TEST

Hypotheses testing on 96 samples was done using the SPSS 24 application. The research hypothesis can be accepted if the value of Sig. < 0.05.

Table 4. Hypotheses Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.449	2	59.725	14.784	.000 ^b
	Residual	375.707	93	4.040		
	Total	495.156	95			

Based on the test results in Table 4, it appears that the value of Sig. is 0.000 (<0.05) so that H_1 accepted. It can be concluded that financial literacy and risk perception simultaneously have a significant effect on investment decisions.

Table 5. R-Square

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 ^a	.241	.225	2.010

Table 5 shows the value of the coefficient determination shown by the R-Square, which is 0.241, which means 24.1% of the Y variable can be explained by X1 and X2, and the remaining 75.9% is explained by other variables outside this research model.

In addition to simultaneous testing, partial testing is also carried out to answer H_2 and H_3 as shown in Table 6. The research hypotheses (H_2 and H_3) can be accepted if the value of Sig. < 0.05 . In Table 6 it appears that the value of X1 is 0.000 and X2 is 0.031 which is less than 0.05.

Table 6. Regression Model

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.789	2.368		1.177	.242
	X1	.153	.033	.417	4.563	.000
	X2	.118	.054	.201	2.194	.031

So it can be concluded that financial literacy and risk perception partially have a significant effect on investment decisions.

DISCUSSIONS

The value of the correlation coefficient or R in Table 5 is 0.491 which shows a fairly strong correlation between financial literacy, risk perception and investment decisions. The correlation coefficient (R) which is positive indicates an equivalent relationship. This means that

the better financial literacy and level of risk perception a person has, the better investment decisions are made.

Based on the results of the study, it was found that financial literacy has a significant effect on investment decisions. This means that financial literacy or one's ability to manage finances is one of the factors that can affect investment decisions. The better a person's financial literacy, the better investment decisions are made.

The results of this study are supported by the research of Audini *et al* (2020) who found that financial literacy has a significant effect on investment decisions. Other research that supports is the research of Al-Tamimi & Kalli (2009) which also finds a positive and significant relationship on financial literacy variables and investment decisions on UAE investors.

In this study, the millennial generation who are the research subjects are people who are quite technologically literate so it is very easy to access and obtain information. Information on how to manage personal finances can be accessed easily nowadays, thus enabling the millennial generation to have good knowledge and ability to manage personal finances.

The next variable, namely risk perception also has a significant effect on investment decisions based on the results of tests carried out with multiple linear regression analysis. The results of this study are the same as the research conducted by Saputro & Lestari (2019) which found that risk perception has a significant effect on investment decisions. When investing, there will be potential losses faced by investors, thus rise to a perception of risk.

Potential losses that will be faced by investors due to the uncertainty of future conditions. This is in line with prospect theory which states that in conditions of uncertainty and risk, a person does not always act according to the standards of financial theory. There are psychological factors and erratic behavior in rational choices (Pradikasari & Isbanah, 2018).

Every investor's perception of risk is different, some are risk-averse, some are risk-seeking. Risk aversion behavior affects investment decisions (Waheed *et al*, 2020). Information about risk and then adjusted returns arises because of individual perceptions of risk (Saputro & Lestari 2019). The better the level of individual risk perception, the better the resulting investment decisions. This is because risk is not only seen as a loss but as an opportunity to obtain an expected return.

In this study, the millennial generation as young people who have high self-confidence and optimism tend to be brave in taking risks. The high risk taken is expected to give them an appropriate return. This is in line with what was conveyed by Barber and Odean, (2001) and Schooley & Worden (1999) in the research of Munawar *et al* (2020) that young investors who have higher incomes invest their funds in unstable portfolios which consists of unstable (high risk) stocks.

CONCLUSION

The conclusion of this study is that financial literacy and risk perception have a significant effect on investment decisions. Facing this uncertain pandemic condition, the millennial generation who is quite literate with technology should have good financial literacy. Information about finance and investment can be easily accessed with current technology.

Financial literacy provides long-term benefits, namely the ability to manage finances to be better and able to help the millennial generation make the right decisions in managing their income, either for saving or investing. Through financial literacy, millennials will better understand the benefits and risks they face when managing their income. The characteristics of the millennial generation who have a high sense of optimism and confidence will perceive risk as an opportunity to earn a return. These two capabilities (financial literacy and risk perception), if implemented properly, can make the right investment decisions, which will make the millennial generation's financial condition better and have a more prosperous life in the future.

RESEARCH LIMITATIONS AND FUTURE RESEARCH

This study has limitations, among others, the research sample is only limited to the millennial generation in Denpasar City. This will not be able to generalize to the wider population. In the research model, the coefficient of determination is quite low, indicating that there are other variables that can affect investment decisions. Future research is expected to be able to create a more developed research model both in terms of variables, analytical techniques or analytical tools. In addition, the research population able to be made even larger, such as covering one country in order the research results can be generalized.

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