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THE EFFECT OF FINANCIAL LITERACY ON INVESTMENT DECISIONS (A STUDY ON MILLENNIAL GENERATION IN FIVE BIG CITIES IN INDONESIA)

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Abstract

Investment decision is one of the concepts in finance, where an individual, with investment decision, may expense his or her assets and allocate them for an investment product. The allocated asset is expected to yield future profit. The making of an investment decision is based on financial behavior. Financial behavior is considered to provide a depiction of how an individual makes an investment decision. Behavioral finance is one of the variables affecting financial literacy. Thus, the present study aims to view how financial literacy affects investment decisions. The present study was conducted in five big cities with largest millennial population in Indonesia, namely DKI Jakarta, Surabaya, Bandung, Semarang, and Serang. This generation is a generation with financial behavior propensity and investment that are different from other generations. The questionnaire was distributed to the respondents in order to measure their financial literacy and investment decision. The present study applied t-test to test the hypothesis of the study. The result of the study found that financial literacy affected the investment decision by 39.56%. The implication of the study is that an individual's good investment decision is determined by his or her financial literacy.

Keywords: Behavioral finance, financial literacy, investment decision, millennials

INTRODUCTION

Millennial generation is one of the four generational classifications. In Indonesia, it equals 33.75% of the Indonesian population. Budiati et al. (2018) reported that there are five provincial capitals with the largest number of millennial generations, namely DKI Jakarta, Surabaya, Bandung, Semarang, and Serang. According to Mulyantini (2018), millennials prefer to save their money for short-term purposes, are unwilling to make a long-term investment, and are capable of traveling, which also may generate money. Millennial generation exhibits an investment method that is different from the previous generations did. They tend to make their investment in a company with a clear mission, such as product and service offered by hedge funds. Thus, they have a higher tendency to participate in a stock market.

Financial literacy refers to an ability to know how money works in this era, how an individual manages it, and how he or she invests it (Abdeldayem, 2016). When an investor makes his or her investment decision, he or she needs to consider market conditions, risk, rate of return. An investor requires a good financial literacy index before making any investment decision (Putri & Hamidi, 2019). Financial services authority reported that the financial literacy index of Indonesian people was low (38.03%), this report was based on 2019 National Survey on Financial Literacy. That survey did not only measure the respondents' financial literacy but also measure the role of financial literacy in financial decision-making, both in saving and investing. The present study was aimed at finding out the effect of financial literacy on the investment decision, the subject of the study was millennial generation in five big cities in Indonesia. The present study is different from the previous study. The present study involved millennial generation, which allows the different results of the study.

LITERATURE REVIEW

Behavioral Finance

Behavioral finance focuses on how an investor interprets and acts based on the information he/she obtains in order to make an investment decision (Dhankar, 2016). Thus, when an individual makes a judgment, he/she should be able to make a choice among the available options, develop, and evaluate. Thus, behavioral finance provides an individual with a picture in making an investment decision, and it is one of the components affecting financial literacy (Soetiono and Setiawan, 2018).

Financial Literacy

According to Ates et al. (2016), financial literacy is a key that should be taken into consideration when an individual makes an investment decision. Besides, it may lead to a better financial decision. There are indicators to measure financial literacy, according to Bongomin et al. (2016), they are:

1. *Behavior*, it is associated with the attempts and purpose of an individual in utilizing his/her budget.
2. *Skills*, this indicator relates to the ability to understand the benefit and carry out simple calculations regarding finance
3. *Knowledge*, this refers to an individual's level of understanding of financial products and their instruments.
4. *Attitude*, this indicator refers to one's ability to make a decision and take effective action.

Investment Decision

According to Halim (2015), investment, in principle, refers to the activity of placing some amount of money and expect to gain profit from it in the future. In order to gain the expected profit, an investment process that may assist an investor in making an investment decision is required. Such a process comprises:

1. Determining the purpose of the investment
2. Analyzing a stock or some stocks
3. Creating a portfolio of the stock
4. Evaluating the performance of the portfolio
5. Revising the performance of the portfolio

According to Putri and Hamidi (2019), indicators to measure an investment decision are:

1. Return, which refers to the profit of the investment expected by an investor.
2. Risk, the higher the rate of return, the higher the risk; these two aspects are interrelated.
3. The time factor, selecting the length of time of investment, is crucial; this may influence the investor's behavior toward the investment activity. Thus, the length of the investment may affect the size of return and the risk of investment.

Investment decision can be measured using return, risk, and time factor. Return refers to the profit gained from the investment. Risk, in addition to expecting the return, an investor should bear the risk of his/her investment. With regard to the time factor, this component greatly influences the investment because it determines the return and risk received by an investor.

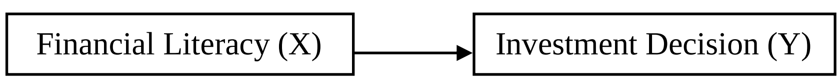
Framework

The present study discussed a variable affecting an investment decision (i.e., financial literacy). Financial literacy refers to knowledge and understanding of a basic financial concept that is viewed from behavior, skills, knowledge, and attitude, which aims to make an effective decision in a financial context.

The present study measured how significant financial literacy affects the investment decision using some indicators, namely, behavior, skills, knowledge, and attitude. Behavior is associated with one's attempt and goal to use his/her budget in order to achieve welfare and prosperity. Skills refer to an individual's ability to make a simple calculation, including calculating the return and interest of a financial product or service. Knowledge is associated with an individual's level of understanding of the purpose of financial product and its instrument, including benefit, risk, as well as his/her obligation and rights as a customer so that he/she possesses financial knowledge to obtain financial welfare. Attitude refers to an individual's attitude relating to a financial institution, such as interest toward the product and services of the financial institution and capability of taking effective action in the present and the future, as well as capability of managing his/her finance (Bongomin et al. 2016).

Abdeldayem (2016), Awais et al. (2016), and Putri & Hamidi (2019) show that financial literacy affects investment decision. When an individual possesses better financial literacy, he/she may make a better investment decision. In addition, financial literacy may affect investment decision based on, among other factors, age. Based on the description above, the following framework is proposed:

Figure 1 Conceptual Framework



RESEARCH METHOD

The population of the study was the millenial generation in five big cities in Indonesia, namely DKI Jakarta, Surabaya, Bandung, Semarang, and Serang whose aged 19-39 years old (6,378,645 people). The sample of the study was determined using Slovin's formula with 95% confidence interval and 5% margin of error. The calculation result showed that the sample size was 399.99. To make it simple, it was rounded up to 400. Thus, the minimum sample size for this study was 400 respondentsThe study began by conducting validity test and reliability test of each item of the questionnaire. The researchers applied Pearson Product moment correlation technique for validity test and Cronbach's Alpha for the reliability test. The rtable value of 0.361 with a significance level (α) of 5% (0.05) and rtable of 0.6 for the reliability test were used.

Following the result of the validity test, seventeen items used to measure the financial literacy and investment decision were considered valid (greater than 0.361). Accordingly, these items can be used as a measure in the present study. Then, the result of the reliability test exhibited the value of Cronbach's Alpha > 0.6, meaning that the items for financial literacy and investment decision were reliable to be used as a measuring instrument for the study.

Furthermore, descriptive statistical analysis was also made for each variable. After that, the classical assumption test, i.e., normality test and heteroscedasticity test, were also done. Regarding the normality test, one-sample Kolmogorov-Smirnov test was applied, while Spearman's rho was applied to perform heteroscedasticity test. Once the classical assumption is satisfied, simple linear regression was done. Then, hypothesis testing using t-test and coefficient of determination test were done to out the effect of the variable.

RESULTS AND DISCUSSION

Table 1 Descriptive Analysis of Financial Literacy and Investment Decision

No	Variable	Statement	Percentage	Category
1	Financial Literacy	I always save my money regularly	77.81	Good
		My spending complies with the budget I have made	75.50	Good
		I always actively make any form of saving every month	79.69	Good
		I have the ability to find out the benefit of a financial transaction	79.06	Good
		I have the ability to calculate the cost of a financial transaction	80.31	Good
		I have an ability to allocate personal budget	81.06	Good
		I have a good ability to use financial product and services	83.25	Excellent
		I always compare the price before selecting a product or service	88.13	Excellent
		I am always interested in financial news	75.63	Good
		I am interested in having business with a financial institution.	74.63	Good
Mean Score of Financial Literacy			79.51	Good
2	Investment Decision	I prioritize the return of the investment product I choose.	80.94	Good
		I try to seek any crucial information from different parties to find out the return I will receive.	82.44	Excellent
		Before making an investment decision, I always learn the risk that i would receive	82.69	Excellent
		I understand how to minimize investment risk.	78.44	Good
		I select the time period and return that can satisfy the expected return and risk.	79.44	Good
		I can believe in myself to settle financial problems.	83.50	Excellent
		I can believe in myself to do something properly.	85.25	Excellent
Mean Score of Investment Decision			81.81	Excellent

Table 2 Result of One-Sample Kolmogorov Smirnov Normality Test

		Unstandardized Residual
N		400
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.87081575
Most Extreme Differences	Absolute	.035
	Positive	.035
	Negative	-.022
Test Statistic		.035
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

As shown in table 2, the value of asymp.sig was 0.200. Since it was greater than significance 0.05. Thus, the data of the study were normally distributed.

Table 3 The Result of Heteroscedasticity Test using Spearman's rho

Correlations

			Literasi Keuangan	Unstandardized Residual
Spearman's rho	Literasi Keuangan	Correlation Coefficient	1.000	.036
		Sig. (2-tailed)	.	.477
		N	400	400
	Unstandardized Residual	Correlation Coefficient	.036	1.000
		Sig. (2-tailed)	.477	.
		N	400	400

As shown in Table 3, the significance value of Sig. *(2-tailed)* of financial literacy variable was 0.477. Since the value of the independent variable was greater than 0.05, it could be concluded that there was no problem of heteroscedasticity.

Table 4 The Result of Simple Linear Regression Analysis

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11.309	.944		11.985	.000
literasi keuangan	.446	.028	.629	16.146	.000

a. Dependent Variable: keputusan investasi

Based on the output, as shown in Table 4, the constant value and the regression coefficient can be seen. Thus, the following simple linear regression equation can be made:

Y = 11.309 + 0.446X

It was found that there is a positive relationship between the variables, meaning that the higher the millennials' financial literacy, the better the investment decision. Decision-making criteria:

H0: Financial literacy does not significantly affect the Investment Decision.

H1: Financial literacy significantly affects Investment Decision

Table 5 Hypothesis Testing Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.309	.944		11.985	.000
	literasi keuangan	.446	.028	.629	16.146	.000

a. Dependent Variable: keputusan investasi

Following the SPSS output as shown in Table 5, the tcount was 16.146, and the ttable was 1.966. Since tcount > ttable, H0 was rejected, and H1 was accepted. In other words, financial literacy significantly affects the investment decision.

Table 6 The Analysis Result of Coefficient of Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629[a]	.396	.394	2.87442

a. Predictors: (Constant), literasi keuangan

$KD = r^2 \times 100\%$

$= 0.629^2 \times 100\%$

$= 39.56\%$

Based on the calculation result, it was found that the coefficient of determination was 39.56%, it means that financial literacy accounts for 39.56% of investment decision, while the rest 60.44% is accounted for by other variables that are not examined in the present study.

Based on the descriptive analysis result, as shown in Table 1, it was found that overall, the millennial generation in five big cities in Indonesia was 79.51%, meaning that respondents possessed a good understanding about the basic financial concept and had applied it in the form of behavior or habit. However, the descriptive analysis result showed that millennial generation in five big cities in Indonesia exhibited a low tendency in interacting with financial institutions, knowing financial news, and noncompliance between the designed budget and the expense made.

Based on the result of simple linear regression analysis, it was found that Y = 11.309 + 0.446X, where Y refers to Investment Decision variable and X refers to Financial Literacy variable. It was found that there is a positive relationship between the variables, meaning that the higher the millennials' financial literacy, the better the investment decision. The hypothesis testing result showed that financial literacy significantly affects investment decision. This is consistent with the result of the study conducted by Abdeldayem (2016), Awais et al. (2016), Assefa & Rao (2018), Ahmed et al. (2018), which states that an individual with high financial literacy exhibits improved investment decision. However, the present study contradicts the study conducted by Arif, K (2015) and Arianti (2018), where they found that financial literacy does not significantly affect investment decision.

CONCLUSION

The result of the present study provides evidence that financial literacy significantly affects the investment decision of millennial generation in five big cities in Indonesia in 2019. The implication of the study is that the millennials should learn more about the return of investment to make, such as the ability to prioritize the return of the investment product, seek information from various parties about the return to receive, and to consider the length of time of the return and the risk. Besides, millennial generation should be more open towards financial institutions, more interested in financial news, and be able to adjust their expenditure to the budget they have made. The role of the government is required in order to optimize the financial institution in improving financial literacy by conducting collaboration with various parties.

Accordingly, it is suggested for the future research to take samples from other millennial generation for their study such as generation Z or generation X to find out the understanding of financial literacy and investment decision of each generation in five big cities or other cities in Indonesia. The future researchers can also study other variables such as financial efficacy, income, and other factors that influence the investment decision.

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