

THE INFLUENCE OF FINANCIAL LITERACY, FINANCIAL BEHAVIOR AND INCOME ON INVESTMENT DECISION

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Abstract

This research aims to analyze and measure the influence of financial literacy, financial behavior and income on investment decisions. The type of research used is quantitative research descriptive method. Types and data sources used are primary data that is data collected and processed by the researcher himself from the object. The amount of population in this research is 29.231 student and the sample technique used is random sampling by using slovin formula. Data were collected by using questionnaire method from 100 student become sample in this research. Data analysis techniques used in this research are descriptive statistical analysis, data quality test, classical assumption test, multiple linear regression test, F test, t test and coefficient of determination with the help of software program SPSS version 22. The results of this research indicate that financial literacy no significant effect on investment decisions, while financial and income behavior have a significant effect on investment decisions.

Keywords : *Financial Literacy, Financial Behavior, Income and Investment Decisions*

1. INTRODUCTION

Financial Literacy (Financial Literacy) is a must for every individual to avoid financial problems because individuals are often faced with a trade off situation where one must sacrifice one interest for the sake of other interests. According to Robb and Woodyard (2011) sufficient financial literacy will provide a positive influence on the financial behavior of a person, such as set or allocate finances appropriately.

Consumerism attitude that became a habit at this time make people less have a culture of saving for example in terms of investing. There are still many people who have not realized the importance of having financial management in their personal lives because people still think that personal financial investment

planning is only done by people who have high income only. But on the other hand, there are also individuals who have high incomes but have no investment planning on their personal finances (Pritazahara, 2015).

According to Masassya (2006) states that most of the allocation of funds aimed at several things namely, investment, saving and consumption. Among the three, the most beneficial type of allocation in the future is investment. Planning investment in personal finance is important, because it is an independent learning process to manage finances in the present and future (Pritazahara, 2015).

Investment is a sacrifice made nowadays with the aim of gaining greater benefits in the future (Haming and Basalamah, 2010). One of the factors needed to make an investment is

capital or funds. Sources of funds can come from loans or personal funds. In addition to knowledge of finance, income and experience in investing also affect investment decisions, the more income a person has in managing the finances, the better the way of managing his finances for the future by considering the risks that will occur and tolerating those risks (Nababan & Sadalia, 2013).

Based on the World Bank survey, it shows that Indonesia's financial literacy rate is only 20%. This is lower compared to ASEAN countries such as Filipino 27%, Malaysia 66% Thailand 73% and Singapore 98%. Therefore it is needed Financial Literacy in improving the economy.

Students as young people will not only face the increasing complexity in financial products, services and markets, but they are more likely to face financial risks in the future. (Lusardi and Mitchell, 2007). The problem in this research is the low financial literacy and financial behavior that occurs among the students, this is seen during initial observation in some students of the Faculty of Economics, Pamulang of University said that it is still not able to manage their own lifestyle and pattern because of the high level of consumptive that makes them irrational in buying their needs, besides also in managing the money they receive from parents or scholars, they faced with a variety of complex financial options, including paying tuition, paying rent or rent, repaying loans, budgeting, saving, following insurance and even working so they have to balance their lives both in the workplace, college and life social. This fact is what encourages the development of the theory of financial behavior (financial behavior theory) which is the application of psychology in the discipline of financial science. Financial behavior is instrumental in making investment decisions. The

investment decision maker don't always behave in a manner consistent with the assumptions made according to the perception and understanding of the information received (Christanti and Mahastanti, 2011).

When making investment decisions, individuals are relatively dominated by the expected utility theory. Expected utility theory is a risky decision and aims to achieve maximum results (Tversky and Kahneman, 1981). This theory assumes that individuals who make decisions are rational, but often decision makers are not rational at the time of their choice (Robison, Shupp, and Myers, 2010). Kahneman and Tversky (1979) criticize the utility theory used in making investment decisions especially when risky conditions are based on human psychological factors. Then the utility theory was developed and prospect theory was born. Human behavior in making decisions is based on psychological factors, making a risky decision can be interpreted as a choice or gamble. Manurung (2012) states that individuals in investing not only use estimates of the prospects of their investment instruments, but psychological factors also have a big role in determining decision-making. Learn how psychological factors are emotional can affect financial decisions, and financial markets expressed by Nofsinger (2001) by defining the theory of financial behavior is the study of how humans actually behave in financial related decisions. Behavioral finance (behavioral finance) is an approach that explains how people make investments or activities related to finance is influenced by psychological factors.

The problems in this research are also expressed by Welly's (2016) study which shows that aspects of financial literacy such as general knowledge of personal finance, savings and loans, insurance, and investment

simultaneously (whole) have a significant influence on lecturer's investment decision, employees, and students at STIE Multi Data Palembang. And this research is also appropriate conducted by Ni Made Dwiyana Rasuma Putri et al (2017) said that financial literacy has the greatest influence in determining the behavior of individual investment decisions compared with sociodemographic factors. Meanwhile, according to research Musdhalifa (2016) shows that the significant influence where locus of control, financial knowledge and income positively affect the decision to invest in the community of Makassar.

Here is a conceptual framework image of the variables to be studied as follows:

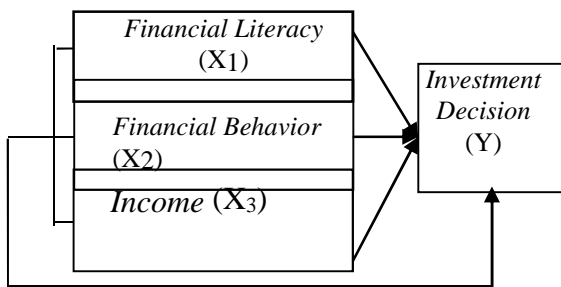


Figure 1. Conceptual Framework

Based on the description and framework that has been described, the researcher formulates the research hypothesis as follows:

- H₁ : There is the influence of financial literacy on investment decisions
- H₂ : There is influence of financial behavior to investment decision
- H₃ : There is an influence of income level on investment decisions
- H₄ : There is the influence of financial literacy, financial behavior and income level collectively to investment decisions

2. LITERATURE REVIEW

2.1. Financial Literacy

Financial knowledge and skills in managing personal finance are essential in everyday life. Krishna, Rofaida, and Sari (2010) explain that financial literacy helps individuals to avoid financial problems.

Financial Literacy according to the Financial Services Authority (2013) is a series of processes or activities to increase the knowledge, confidence and skill of consumers and the wider community so that they are able to manage finances better.

According to Kim (2001) in Sabri (2011) financial literacy is the basic knowledge that people need to survive in modern society. This basic knowledge involves knowing and understanding the complex principles of spending, saving, and investing. Meanwhile, according to Lusardi & Mitchell (2007) describes financial literacy is the knowledge that someone has about financial instruments, including, one's knowledge about savings or saving, insurance or insurance, investment and other financial instruments. Financial Literacy can be interpreted as financial knowledge, with the aim of achieving prosperity.

From the above understanding, it can be concluded that financial literacy is a person's ability to know finance in general, where the knowledge includes savings, investments, debt, insurance and other financial instruments.

2.2. Financial Behavior

Financial Behavior is a behavior related to financial applications. According to Ricciardi (2000), financial behavior is a discipline of science in which the inherent interaction of disciplines of science and continuously integrate so that the discussion is not done isolation. A person who wants to learn financial behavior must have an

understanding of the psychological, sociological, and financial aspects.

Shefrin (2000) defines financial behavior as a study of how psychological phenomena affect their financial behavior. Nofsinger (2001) defines the financial behavior of learning how humans actually behave in a financial setting. In particular, learn how psychology influences financial, corporate and financial market decisions.

2.3. Income

Income is one indicator to measure the welfare of a person or society, so that the income of this society reflects the economic progress of a society (Luminatang, 2013). According Sukirno (2006), income is the amount of income received by the population on their work performance during a certain period, whether daily, weekly, monthly or yearly. A person's income is fundamentally dependent on work in the field of services or production, as well as the time spent on work, the level of income per hour received (Luminatang, 2013).

2.4. Investment Decision

According to Rusdin (2006) the decision to invest is individual and depends entirely on a free person. Therefore, before arriving at an investment decision, first consider carefully. According to Christanti & Mahastanti (2011), an individual's investment decisions during these two sides are a) the extent to which decisions can maximize the wealth (economic), b) Behavioral motivation (investment decision based on investor psychological aspect).

3. RESEARCH METHOD

The type of research used is quantitative descriptive method. The

population in this study is all students active in the odd semester of academic year 2016/2017 at the Faculty of Economics, University of Pamulang, amounting to 29,231 students.

The sample technique used is simple random sampling technique. To determine the size of the sample is done through a statistical approach by using the Slovin formula (Sugiyono, 2016).

$$n = \frac{N}{1 + N(e)^2}$$

Based on the calculation of slovin formula, the sample obtained as much as 99.65 rounded to 100. Type and source of data used is the primary data of the students active odd semester academic year 2016/2017 Faculty of Economics at the University of Pamulang. Data collection techniques in this study are 1) Observation, 2) Library Studies, 3) Questionnaire. Data analysis technique used in this research is statistical analysis method by using SPSS application program version 22 for windows.

4. RESULT AND DISSCUSION

4.1. Descriptive Statistics Analysis

Table 1. Descriptive Statistic Result

	N	Min	Max	Mean	Std. Dev.
FL (X1)	100	50	96	77,00	7,439
FB(X2)	100	22	61	46,90	5,902
Income (X3)	100	19	35	26,97	3,605
ID (Y)	100	20	38	29,63	3,784
Valid N (listwise)	100				

Based on table 1 above shows that the number of respondents (N) as many as 100 students. The minimum value

indicates the respondent's answer at least and maximum is the highest answer.

4.2. Data Quality Test

To know the value of r_{tabel} , it is known the number of respondents as much as 100 respondents, then the free degrees that have the equation $df = n - k$ or $df = 100 - 4$ at the level of significance 0.05, then got the r_{tabel} number of 0.195. So it can be concluded that all statement items of the variables in this

study is valid. While the results of testing data obtained from each item statement on the independent and bounded variables have the value of cronbach's alpha is greater than the reliability standard value of 0.60. So it can be said that the instrument in this reserach is reliable and feasible to use.

4.3. Classical Assumption Test Results

4.3.1. Normality Test

Table 2. Normality Test Result

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Dev.	2,52598534
Most Extreme Differences	Absolute Positive	,045
	Negative	-,042
Test Statistic		-,045
Asymp. Sig. (2-tailed)		,200 ^{c,d}

Based on table 2 above that the value of significance shows the figure of $0.200 > 0.05$. So it can be said that the data used in this study is normally distributed

4.3.2. Multicollinearity Test

Table 3. Multicollinearity Test Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Financial Literacy	,739	1,354
Financial behavior	,701	1,427
Income	,915	1,093

Based on table 3 above can be stated that the value of Variance Inflation Factor (VIF) is far below the number 10 that is 1.354 on the variable Literasi Finance, 1.427 on the variable Financial Behavior and 1.093 on variable Income, while the tolerance

value shows larger numbers 0.10 ie 0.739 on variable Financial Literacy.

0.701 on the variable of Financial Behavior and 0.915 on the Income variable. Thus it can be concluded in the regression model don't occurred multicollinierity between independent variables.

4.3.3. Heteroscedasticity Test

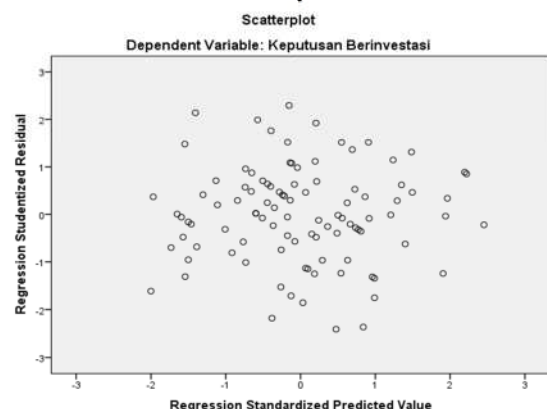


Figure 2 . Heteroscedasticity Test Result

Based on the scatterplots graph shown in Figure 2 above shows that the

points spread randomly and do not form a pattern, and are scattered below or above the number 0 on the y-axis. It can be concluded that the research data don't occurred heteroscedasticity.

4.3.4. Autocorrelation Test

Table 4. Autocorrelation Test Result Model Summary^b

Model	R	R Square	Adjusted R Square	SEE	DW
1	,745 ^a	,554	,540	2,565	1,82

Based on table 4 above shows that the results of the autocorrelation test output known DW value of 1.820, then this value with a significant table value of 5%, the number of samples N = 100 and the number of independent variables 3 (K = 3) if the value of DW 1.820 > of the value dU = 1.613.

4.4. Hypothesis Test

4.4.1. Multiple Linear Regression Test

Table 5. Multiple Linear Regression Test Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	,952	3,092		,308	,751
	FL	,074	,040	,145	1,830	,070
	FB	,125	,052	,195	2,400	,018
	Income	,635	,075	,605	8,494	,000

From table 5 above shows that the result of multiple linear regression equation that is formed is $Y = 0,952 + 0,074x_1 - 0,125x_2 + 0,635x_3 + e$.

4.4.2. Coefficient of Determination Test (R²)

Table 6. Coefficient of Determination Test Result

Model	R	R Square	Adjusted R Square	SEE
1	,745 ^a	,554	,540	2,565

Based on table 6 above that the value of adjusted R square is 0,540. This shows the results of variables Decisions Invest can be explained by the three variables of Financial Literacy, Financial Behavior and Revenue of 54%. The Standard Error of the Estimate (SEE) value is 2,565. The smaller the level of SEE will make the regression model more accurate in predicting the dependent variable.

4.4.3. T Test

From the result of analysis using SPSS 22.0 contained in tables of multiple linear regression analysis and also answer the problem formulation contained in the previous chapter is the first hypothesis, indicating that the financial literacy variable obtained tcount value of 1.830. To determine the distribution of t is sought at $\alpha = 5\%$: $t_{2} = 2.5\%$. With a 2-sided test the 0.025 significance of the results obtained for the t table is 1.984. From the above calculation results obtained Financial Literacy (X1) has tcount < ttable is $1.830 < 1.984$ with a significance value of $0.070 > 0.05$. This can be interpreted that the Financial Literasi not positively and significantly influence on the Decision of Investing. Then H1 is rejected. The second hypothesis, shows the results of the calculation of Financial Behavior (X2) obtained tcount value > ttable is $2,400 > 1.984$ with a significance value of $0.018 < 0.05$. This shows that Financial Behavior influences investment decisions. Then H2 is accepted and the third hypothesis,

shows that the result of calculation of Revenue value (X3) obtained tcountable value ttable is $8.494 > 1.984$ with a significance value of $0,000 < 0.05$. This shows that income has a positive and significant effect on the Investment Decision. Then H3 accepted

4.4.4. F Test

Table 7. F Test Result

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Reresion	785,630	3	261,877	39,799	,000 ^b
Residual	631,680	96	6,580		
Total	1417,31	99			

Based on table 7 above obtained value of Fcount equal to 39,799 by using confidence level 95% and significant level 0,05. Then it can be concluded that hypothesis four or H4 accepted, which means that the multiple regression model can be used to measure the level of investment decisions or simultaneously have a positive and significant impact on the Decision of Investing.

4.5. Discussion

The discussion in this study indicates that the financial literacy variable has no significant effect on the investment decision, evidenced by the value of tcount < ttable is $1.830 < 1.984$ with a significance value of $0.070 > 0.05$. This can be interpreted that the Financial Literasi not positively and significantly influence on the Decision of Investing. These results are not in line with the results of research conducted by Welly et al (2016) showed that partially variable financial literacy in the aspects of savings and loans and investment alone that significantly affect investment

decisions and these results are also in line with the variable financial literacy in the insurance aspects indicate that no significant effect on investment decision in STIE Multi Data Palembang. Then these results are also in line with the results of research conducted by Melisa (2015) indicates that the Literasi financial investors have no significant effect on investment decisions.

Variable of Financial Behavior influence to investment decision, evidenced by value of tcount > ttable is $2,400 > 1,984$ with significance value equal to $0,018 < 0,05$. These results are in line with the results of research conducted by Aminatuzzahra (2014) can be concluded that there is significant influence between behavioral variable (attitude) finance to investment decision making. So this research is also in accordance with the theory of financial behavior perspective in financial decision making. The better one's attitude or mental finance then the financial behavior of a person in making better investment decisions.

Income significant effect on investment decisions, evidenced by the value of t count > ttable is $8.494 > 1.984$ with a significance value of $0.000 < 0.05$. The results of this study in line with research conducted by Musdhalifa (2016) showed that income has a significant effect on investment decisions have an influence. This is also in line with the results of Kusumawati (2013) research that a person's income has an influence on the management of his personal finances, the more their income the greater his judgment to make an investment decision. And this result is not in line with the results of research conducted by Ni Made Dwiyan and Henny (2017) shows that Revenue does not significantly influence the behavior of inventory decisions. That is, a person's income level is not a benchmark for making an individual investment decision. The same thing in

Rita and Kusumawati's research (2010) states that the higher the income a person has, the more a person wants to buy what he wants beyond what is needed, someone who is like this less understood by the benefits of saving or investing for the future. While simultaneously, for the variables X1, X2 and X3 together significant effect on Investment Decision, evidenced by the value $F_{count} > F_{table}$ that is $39.799 > 2.70$ and the value of significance $0,000 < 0.05$.

5. CONCLUSION

Based on the results of multiple linear regression test, shows that the value of constant and coefficient of variables that have a positive value indicates that the equation has a direct relationship. Based on T test results, indicating that for financial literacy variable has no significant effect on investment decisions. Based on the results of research with F test, it is known that the overall variables of financial literacy, financial behavior and income together have a significant effect on investment decisions.

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