

The Impact of Financial Literacy, Investment Knowledge, and Investment Motivation on Investment Decisions

Sri Handini

Dr. Soetomo University Surabaya, Indonesia

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ABSTRACT

This study investigates the relationship between management students' investment decisions and their financial literacy, knowledge, and motivation at Dr. Soetomo University in Surabaya. A total of 308 students from this academic program were chosen for the study using purposive sampling techniques, guaranteeing that the study's population is representative of the student body. We distributed carefully crafted questionnaires for data collection through Google Forms as part of the methodology used in this study. Purposive sampling methods are used to ensure the student body is well represented. We meticulously examined the gathered data using a variety of statistical methods. Among these were evaluations of reliability and validity, analyses of multiple linear regression, tests of classical assumptions, evaluations of correlation coefficients, and F and t-tests. This study uncovered insightful relationships between students' financial literacy, investment knowledge, motivation, and investment decisions. The study found no statistically significant impact of financial literacy on investment decisions, contrary to expectations. The results of the study, however, highlighted the importance of respondents' unique investment knowledge and motivation in molding their investment choices. Students' level of financial literacy, investment knowledge, and investment motivation significantly impacted their investment decisions as a whole. By considering these factors in context, we can better understand the complex dynamics at work when management students at Dr. Soetomo University make investment decisions.

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Corresponding Author:

Name: Sri Handini

Institution Address: Jl. Semolowaru No.84, Menur Pumpungan, Kec. Sukolilo, Surabaya, Jawa Timur 60118

e-mail: srihandini321@gmail.com

1. INTRODUCTION

In early 2020 there was a pandemic caused by the COVID-19 virus that attacked human health throughout Indonesia [1]. The COVID-19 pandemic has resulted in everyone not being able to leave the house normally, which has caused all activities including learning, work, and activities that should interact directly to be carried out online. Even to help the economy, many people during

Covid then started opening businesses online and E-commerce platforms become critical to businesses in the digital economy, however these companies' capacity to expand sustainably is severely impacted by the supportive environment in which they function [2]. Finance is currently one of the main livelihood destinations of everyone, everyone needs money to meet the needs of

life. Usually, the general public allocates their funds into consumption, savings and investing. Investment can be defined as the allocation of money or capital in a company or project with the expectation of generating future profits. This can take the form of various types of investments, such as capital investment, which involves acquiring physical assets to further long-term business goals and objectives [3]. Capital-intensive businesses, like those in the energy or industrial sectors, often require specific assets to operate and may make large capital investments to innovate, modernize, or gain a competitive advantage. When presenting a project as a good investment, it is common to use methods like net present value and internal rate of return to demonstrate its potential for profitability. Investment project management involves the careful planning and coordination of resources, assessment of potential profitability, and management of risks to achieve investment goals. An investment project is a detailed proposal for spending resources with the aim of achieving future profits, and it typically requires a thorough feasibility study and financial justification.

Investment is one of the right ways to allocate finances. By investing this, a person learns independently how to allocate finances. Along with the times in this digitalization era, the ability to manage finances must be done carefully and smartly. Knowledge and insight into financial management procedures are needed because they can be used as a basis for making decisions to maximize financial management. This decision involves evaluating risk, potential return, investment objectives, and other factors that can affect investment success [4].

In essence, students exhibit an inherent inclination toward engaging in capital market investments. Nevertheless, numerous challenges persist, particularly for inexperienced investors, who may lack an understanding of investment mechanisms or foresee the risks inherent in investment endeavors. Adequate knowledge, firsthand

experience, and astute business acumen become imperative in analyzing the viability and appeal of potential investments [5].

Financial literacy is part of the ability we have to distinguish in terms of financial choices and determine future financial decisions or economic events in a general context. It is used to utilize resources to the maximum for a purpose. Because the level of difficulty in financial matters can also arise due to ignorance or lack of financial knowledge which results in errors in managing finances [6].

2. LITERATURE REVIEW

2.1 Financial Literacy

According to [7] financial literacy is a set of knowledge and / or abilities related to personal financial management and financial understanding of several things including savings, insurance, and investment. According to Chen & Volpe (1998) conveyed 4 indicators of financial literacy, namely [7]:

- 1) Fundamental Understanding of Financial Management
Basic comprehension of financial management is foundational for individuals and organizations alike [8]. It involves an overarching grasp of financial principles, encompassing areas such as budgeting, financial statement analysis, and the time value of money [9].
- 2) Credit Management
Credit management pertains to the strategic handling of credit operations within an entity, encompassing credit assessment, granting credit, and credit monitoring [10]. Effective credit management involves meticulous evaluation of creditworthiness, establishing credit policies, and implementing strategies to minimize credit risk [11].
- 3) Savings and Investment Management
The discipline of savings and investment management revolves around optimizing financial resources by deploying them into various

investment avenues while considering risk and return trade-offs [12]. This involves comprehensive planning, asset allocation, and continual evaluation of investment performance [13].

4) Risk Management

Risk management encompasses the identification, assessment, and mitigation of potential risks that could impact financial objectives [14]. It involves various strategies such as diversification, hedging, and insurance to mitigate adverse effects on financial positions [15].

2.2 Investment Knowledge

Understanding the basics of investment, including the types of investments such as stocks, bonds, mutual funds, and exchange-traded funds, is vital to make well-informed investment choices [16]. Additionally, having a clear understanding of one's investment goals and objectives is fundamental before embarking on any investment venture. This aligns with the principle of continuously educating oneself about investment, as highlighted in the 10 basic principles of financial management. By leveraging educational resources and reputable investment platforms, individuals can equip themselves with the necessary knowledge to make sound investment decisions and build a strong foundation for their financial future.

The more knowledge obtained about investment, both through learning and socialization from the capital market, the greater one's desire to invest in the capital market [17]. According to [17] investment knowledge indicators are:

1. Understanding Capital Market Instruments Proficiency in capital market instruments entails a comprehensive grasp of diverse financial tools available for investment purposes [12]. This encompasses a broad array of securities such as stocks, bonds, derivatives, and other financial instruments traded within capital markets [14].
2. Comprehension of Investment Risks

Acquiring knowledge about investment risks involves an in-depth understanding of the various factors that can potentially lead to financial losses or diminished returns in investment portfolios [18]. This includes market risks, credit risks, liquidity risks, and operational risks, among others [11].

a. Understanding Investment Returns

Mastery of investment return mechanisms includes familiarity with the ways in which investments generate profits or losses over a specific period [19]. This encompasses appreciation in asset value, dividends, interest income, and capital gains [12].

b. Apprehension of the Risk-Return Relationship

Knowledge of the intricate relationship between investment risk and return constitutes an essential facet of investment literacy [20]. This concept elucidates how higher levels of risk are typically associated with the potential for higher returns, emphasizing the fundamental trade-off in investment decision-making [21].

c. General Understanding of Diverse Capital Markets

Broad knowledge encompassing various capital markets besides the primary market of interest involves an awareness of international markets, differing regulatory frameworks, and distinct market dynamics [22]. This global perspective aids in diversification and identifying potential investment opportunities beyond domestic markets.

2.3 Investment Motivation

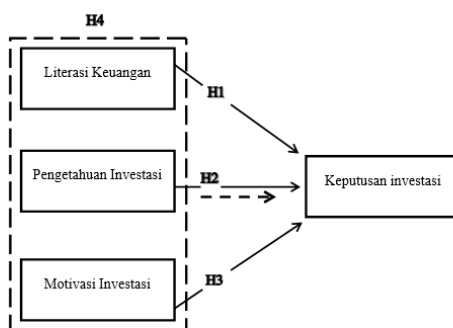
Motivation delineates the intricate process wherein individuals identify their necessities and undertake actions aimed at fulfilling those requirements [23]. It encompasses the internal and external stimuli that prompt individuals to initiate, sustain, and direct their behavior towards achieving

specific objectives or satisfying inherent needs. This dynamic process involves a complex interplay of psychological, social, and environmental factors, signifying the comprehensive nature of motivation in steering human behavior towards goal attainment. Motivation, as a process, plays a crucial role in understanding variations in the level of consumer (investor) behaviour intensity [24]. The investment motivation indicators, as identified by Burhanudin et al. (2021), include:

1. Ownership of the company.

2. Facilitating the growth and advancement of the company.
3. The impact of the familial environment.
4. Requirements fulfilled.

2.4 Conceptual Framework



Gambar 2. 1 Kerangka Konseptual

————— Hubungan (Parsial)
 - - - - - Bersama-sama (Simultan)

Figure 1. Conceptual Framework

In order to provide an explanation for the relationship that exists between independent variables and dependent variables, the conceptual framework was developed.

Hypothesis

In this study, the hypotheses are as follows, and they are based on the theoretical foundation that was presented earlier:

- H1: Financial literacy is believed to significantly influence investment decisions.
- H2: Investment knowledge significantly influences investment decisions.
- H3: Investment motivation is a crucial factor that significantly influences the decisions made regarding investments.

H4: Investing decisions are significantly influenced by financial literacy, investment knowledge, and motivation, all of which are prevalent and equally significant.

3. RESEARCH METHODS

For this investigation, quantitative methods were utilized, and the quantitative approach emphasized empirical evidence to support hypotheses. To make a problem concept more easily understandable from a statistical standpoint, this approach tries to measure it by utilizing variables.

3.1 Research Location

The author conducted research for this study at Dr. Soetomo University in Surabaya. Students from Dr. Soetomo

University Surabaya would make up the sample for this study because the author is interested in determining the extent to which students know about investments. This is why the author chose to conduct this research at this particular location.

3.2 Population

Participants in this study are current students of the management programme at Dr. Soetomo University's Faculty of Economics and Business in Surabaya.

3.3 Sample

For this investigation, the purposive sampling method will be utilized as the sampling technique for respondents. Researchers determine the sample by determining unique characteristics of the research objectives to ensure they are expected to answer research problems. Researchers employ non-random sampling techniques, one of which is purposeful sampling. Here is an example of one of the requirements:

1. Those enrolled in the management study program and those in the economics and business faculty.
2. Taken or completed courses in financial management.

After applying purposive sampling techniques and taking into account the aforementioned criteria, the sample for this study consisted of 308 samples out of the total of 767 students who were enrolled in the faculty of economics and business.

3.4 Data Types and Sources

According to [25] the types of data are divided into 2, namely qualitative and quantitative. This research uses qualitative and quantitative types of data. The primary data that was utilized in this study was collected through the use of questionnaires. In contrast, the secondary data utilized in this study was gathered through previous research, literature, and journals.

3.5 Data Collection Techniques

Techniques for data collection are a method that is utilised in the process of data collection for a study. In data collection requires a certain technique, so that the expected data is collected properly, correctly

and relevantly according to what we expect. In this study the techniques used were Interview, Questionnaire, and Observation.

3.6 Analysis Methods

Quantitative analysis, which is expressed in numerical form, is the type of analysis that was carried out. The collected data is displayed in tabular format to facilitate data analysis and understanding. There was a greater emphasis on organization in this specific case. The collected research data will be analyzed using the statistical tools for the SPSS (Statistical Product and Service Solutions) program. This analysis will support the research findings. In order to obtain accurate and trustworthy test results, it is necessary to select an analysis method that is suitable and adequate.

3.6.1 Descriptive Statistical Analysis

1. Validity Test and Reliability Test Validity Test

A validity test is an example of a test that shows how much of a measuring instrument is used to measure something. According to [26], validity tests are utilised in order to evaluate the validity, validity, or validity of a questionnaire using the appropriate criteria. The validity test uses a correlation between each statement's indicators and the indicators' total score in one variable to determine if a comment is valid. Here are a few potential ways to describe the correlation formula the researcher used:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

With caption :

1. r_{xy} = Pearson correlation coefficient
2. X = Score each question item or statement
 Y = Total score of question item or statement
3. $\sum X$ = Number of scores in distribution X
4. $\sum Y$ = Number of scores in the Y distribution

5. $\sum X^2$ = Number of squares of each score X
6. $\sum Y^2$ = The sum of squares of each Y score
7. N = Number of subjects

The criterion of the r value determines whether the conditions are valid or not.

1. If the number of r counts is greater than or equal to r, then the table is considered to be valid.
2. The statement is considered invalid if the count of r is less than or equal to the table of r.

2. Reliability Test

According to Sugiyono (2018:268) defines reliability tests as the degree to which the data or findings are consistent and stable. Since data processing that is unreliable will result in biased conclusions, it is impossible to proceed with the processing [27]. A trustworthy measuring device is one whose readings don't fluctuate depending on the user's actions. Cronbach's Alpha formula is as follows:

Information:

$$\alpha = \left(\frac{K}{K-1} \right) \left(\frac{s_r^2 - \sum s_i^2}{s_x^2} \right)$$

1. α = Cronbach Alpha probability coefficient
2. K = Number of statement items tested
3. $\sum S^2$ = Number of item score variants
4. SX^2 = Test score variants (all K items)

Reliability tests are carried out after validity tests and are tested as valid statements or questions. The range of Cronbach's alpha is that of 0.5 to 0.6. They settled on a reliability coefficient of 0.6 for this study. The following are the criteria for testing reliability:

1. The instrument is considered to have good reliability if Cronbach's alpha value α is more significant than 0.6. In other words, the device is reliable or reliable.
2. An instrument is considered unreliable if Cronbach's alpha falls below 0.6.

3.6.2 Classical Assumption Test

A. Normality Test

B. To assess the normality of the data, utilize the Kolmogorov-Smirnov normality test (K-S Test) within the SPSS software or visualize the data using a graph. Proficient regression models should possess desirable attributes, including a distribution that approximates normality or is closely normal, and the ability to conduct statistical testing.

C. Multicollinearity Test

In the context of a regression model, multicollinearity refers to a relationship that is either perfect or strongly linear and exists between some or all of the independent variables. The multicollinearity test seeks to establish if the regression model detects correlations among the independent variables, known as the multicollinearity problem. A robust regression model should exhibit no correlations among its independent variables.

D. Heteroscedasticity Test

The aim of the heteroscedasticity test is to identify discrepancies between the variance of an observation's residual regression model and the conflict of other terms. Heteroscedasticity occurs when residual deviations persist across consecutive statements. A desirable model displays homoscedasticity, indicating consistency in data sizes and absence of heteroscedasticity.

3.6.3 Multiple Linear Regression Test

Multiple linear regression is a regression model that involves more than one independent variable. Multiple linear regression analysis conducted to determine the direction and how much influence the independent variable has on the dependent variable [26]. Here's a model of multiple linear regression equations:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Information:

Y = Dependent variable

α = Constant

β_1, \dots, β_3 = Regression coefficient

X_1, \dots, X_3 = Free variable

e = Residual.

3.6.4 Test Correlation Coefficient (R)

Correlation coefficient analysis enables the assessment of the nature and strength of the link between two or more variables. According to Sugiyono (2018) highlights that the direction of this relationship can be conveyed through positive or negative associations, while the correlation coefficient's magnitude indicates the strength of the relationship. Denoted by the letter 'r', the correlation coefficient signifies the extent of correlation between the independent and dependent variables [27]. As the correlation coefficient must fall within the range of -1 to +1 ($-1 \leq r \leq +1$), several potential scenarios may arise, including:

1. The presence of a positive sign indicates that there is a positive correlation between the variables that were examined. This means that any increase or decrease in the values of X will be accompanied by an increase or decrease in the importance of Y. If r is equal to one or very close to one, this indicates a significant favorable influence between the variables examined.
2. A negative sign signifies a negative correlation between the tested variables, suggesting that when X values increase, Y values decrease, and vice versa. A weak correlation between the tested variables is demonstrated by a value of r equal to or closely approximating -1, indicating a negative influence.
3. A value of r equal to zero or very close to zero indicates either a weak correlation or no correlation between the studied and tested variables.

3.6.5 Test Coefficient of Determination (R²)

The purpose of determination analysis, also referred to as R², is to measure how much the model can explain the variation in the dependent variable. Both 0 and 1 are the values assigned to the coefficient of

determination. When the R² value is low, it indicates that the ability of the dependent variables is restricted. According to Gozali (2018): 97, a value that is relatively close to one indicates that the independent variables offer nearly all of the information that is required to forecast the variation of the dependent variable. In this study, determination analysis was employed to determine how much the independent variable could explain the variation in the dependent variable [26]. The specific formula used in this investigation calculates the value of the coefficient of determination.

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

Information

KD = Coefficient of determination

R² = Double correlation coefficient

1. Test the hypothesis

A. F Test (Stimultan)

The F Test, in its simplest form, determines the collective impact of the independent variable (X) on the response triggered by the dependent variable (Y).

B. T-Test (Partial)

Conducting this test aims to determine how much the independent variable contributes, either independently or partially, to explaining the variations in the dependent variable.

4. RESULTS OF RESEARCH AND DISCUSSION

4.1 Descriptive Analysis

The primary data collected in this research directly correlate with the research variables. The analysis results represent the outcomes directly associated with these variables, including both independent and dependent variables. Utilizing the Likert scale, respondents' responses regarding the research subject were measured on a scale ranging from one to five. An interval class table was created to calculate the value or score of respondents' provided answers. The obtained primary data directly pertains to the independent and dependent variables, as evidenced in the subsequent table, reflecting

the findings derived from this conducted research.

1. Respondents' Answers to Financial Literacy (X1)
2. The questionnaire responses, indicating an average of 4.40, demonstrate predominantly affirmative answers. This suggests that most respondents strongly agree. From this, it can be inferred that the variable financial literacy (X1) aligns with the expectations of the respondents.
Respondents' Answers to Investment Knowledge (X2). From the overall answers to the questionnaire questions showing very agreeable answers, with an average value of 4.44, it can be stated that most respondents agree, and it can be concluded that the Investment Knowledge variable (X2) according to respondents is in accordance with what respondents expect.
3. Respondents' Answers to Investment Motivation (X3)
From the overall answers to the questionnaire questions showing very agreeable answers, with an average value of 4.48, it can be stated that most respondents agree, and it can be concluded that the variable

Investment Motivation (X3) according to respondents is in accordance with what respondents expect.

4. Respondents' Answers to Investment Decisions (Y)
From the overall answers to the questionnaire questions showing very agreeable answers, with an average value of 4.47, it can be stated that most respondents agree, and it can be concluded that the Investment Decision variable (Y) according to respondents is in accordance with what respondents expect.

4.2 Test Instruments

After data collection is carried out, namely repondent data, then the data that has been obtained is processed again through several stages of data processing. The earliest stage of data processing is testing the validity and reliability of the questionnaire data, this is so that the data obtained is completely accurate. Data processing on Financial Literacy (X1), Investment Knowledge (X2), Investment Motivation (X3) and Investment Decisions (Y) is carried out using IBM SPSS software for Windows version 25 to simplify the process and so that the results obtained are more accurate.

Validity Test

Table 1. Table of Validity Test

Variable (Criteria)	Correlation value & Significance	Significance level	Information
0,05			
Financial literacy (X1)			
X1.1	0.648 Sig 0.000	0.05	Valid
X1.2	0.722 Sig 0.000		Valid
X1.3	0.566 Sig 0.000		Valid
X1.4	0.718 Sig 0.000		Valid
Investment Knowledge X2)			
X2.1	0.660 Sig 0.000	0.05	Valid
X2.2	0.682 Sig 0.000		Valid

X2.3	0.726 Sig 0.000		Valid
X2.4	0.681 Sig 0.000		Valid
X2.5	0.648 Sig 0.000		Valid
Investment Motivation (X3)			
X3.1	0.759 Sig 0.000	0.05	Valid
X3.2	0.745 Sig 0.000		Valid
X3.3	0.771 Sig 0.000		Valid
X3.4	0.786 Sig 0.000		Valid
Investment Decision (Y)			
Y1	0.803 Sig 0.000	0.05	Valid
Y2	0.751 Sig 0.000		Valid
Y3	0.832 Sig 0.000		Valid

Data source : Appendix of SPSS analysis results

The validity of the question variable for each dimension is considered valid in this scenario if the correlation with a significant value is shown to be less than 0.05, equivalent to a significance level of 5%. As can be seen from the results presented above, the significant value of each question item is *Reliability Test*

lower than the 0.05 threshold established as the considerable value going into the study. As a result, one can conclude that every question included in the questionnaire is understandable to the individuals who responded to it, or one can assert that the data collected is reliable.

Table 2. Table of Reliability Test

Dimesi	Reliability	Information
Financial Literacy (X1)	0,649	Reliable
Investment Knowledge (X2)	0,706	Reliable
Investment Motivation (x3)	0,767	Reliable
Investment Decision (Y)	0,702	Reliable

Data source : SPSS analysis results report

The measurement scale, encompassing Financial Literacy (X1), Investment Knowledge (X2), Investment Motivation (X3), and Investment Decision (Y), demonstrates a confirmed reliability. This affirmation stems

from the SPSS calculation results, revealing that each variable exhibits a Cronbach Alpha value surpassing 0.6, indicating a robust reliability with a minimum Cronbach Alpha exceeding 0.6.

Classical Assumption Test

1. *Normality Test*

Table 3. Table of Normality Test

One-Sample Kolmogorov-Smirnov Test

N		308
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.52325475
Most Extreme Differences	Absolute	.109
	Positive	.009
	Negative	-.049
Test Statistics		.109
Asymp. Sig. (2-tailed)		.200 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

The normality test results table above indicate that the regression model follows a normal distribution. This conclusion is drawn from the probability result of 0.200, which exceeds 0.05. Hence, confirming the feasibility of utilizing the regression model for subsequent analyses in this study.

Multicollinearity Test

Basis of decision making:

- 1. Based on Tolerance

- Tolerance > 0.10 = No multicollinearity occurs
- Tolerance < 0.10 = Multicollinearity occurs
- 2. Based on Vif Value
 - VIF < 10.00 = No multicollinearity occurs
 - VIF > 10.00 = Multicollinearity occurs

Table 4. Table of Multicollinearity Test

Variable	Tolerance Value	VIF value	Information
Financial Literacy (X1)	0.682	1.466	Multicollinearity does not occur
Investment Knowledge (X2)	0.555	1.803	Multicollinearity does not occur
Investment Motivation (X3)	0.583	1.714	Multicollinearity does not occur

Data Source : Appendix of SPSS analysis results

The appendix displays the results of the multicollinearity test, revealing that all variables meet the criteria with a tolerance value greater than 0.10 and a VIF value less than 10. Consequently, it can be concluded

that the regression model utilized in this study doesn't manifest any signs of multicollinearity.

Heterokedasticity Test

Suppose you want to determine whether or not there is heteroscedasticity. In that case, you can either look at the presence or absence of specific patterns on the scatterplot chart, if there is no clear pattern (wavy, widening, then narrowing) in the scatterplot image, or if there are spreading

points above and below the number 0 on the Y axis. Alternatively, you can use the Glejser Test. When conducting a regression analysis, the objective is to determine whether or not there is a disparity in the variance between one residual and another observation. Within the context of the heteroscedasticity test, the decision-making process is predicated on the assumption that if the significance value is more significant than 0.05, there is no heteroscedasticity problem, and vice versa.

Table 5. Table of Heterokedasticity Test

Variable	Sig.	Information
Financial literacy (X1)	0.355	Not happening
Investment Knowledge (X2)	0.116	Not happening
Investment Motivation (X3)	0.429	Not happening

Data source : Appendix of SPSS analysis results

Using the Glejser correlation test, presented in the table above, it is possible to observe that financial literacy, investment knowledge, and investment motivation all have a significant value greater than 0.05. As a result, heteroscedasticity does not apply to these variables.

Multiple Linear Regression Test

The purpose of performing an influence analysis between two or more

independent variables and dependent variables is accomplished through multiple linear regression analysis. In this study, an analysis was conducted on the influence between independent variables (financial literacy, investment knowledge and investment motivation) with dependent variables (investment decisions). The following formula is used, namely:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Table 6. Table of Multiple Linear Regression Test

Unstandardized Coefficients			Standardized Coefficients			
Type	B	Std. Error	Beta	t	Sig.	
1	(Constant)	1.202	.608		1.978	.049
	N_X1	.041	.039	.048	1.033	.303
	N_X2	.179	.033	.281	5.414	.000
	N_X3	.416	.041	.528	10.184	.000

Data source : Appendix of SPSS analysis results

According to the findings presented above, it is evident that the constant value (α value) is 1.202. Additionally, the β value for financial literacy is 0.041, the β value for investment knowledge is 0.179, and the β value for investment motivation is 0.416. To ensure that the equation for multiple linear regression can be obtained in the following manner:

$$Y = 1.202 + 0.041x_1 + 0.179x_2 + 0.416x_3 + e$$

The purchase decision is worth 1,202 if the independent variables of financial literacy, investment knowledge, and investment motivation are all equal to zero. This is assuming that other variables that have the potential to influence the purchase decision are considered to be fixed.

According to the regression coefficient for financial literacy, if one unit of financial literacy increases, then investment decisions will increase by 0.041, and vice versa; if there is a decrease in financial literacy variables by one team, then investment decisions will decrease by 0.041.

According to the investment knowledge regression coefficient, if one unit of investment knowledge increases, then

there will be an increase of 0.179 in investment decisions. Conversely, if there is a decrease of one unit in investment knowledge variables, then there will be a decrease of 0.179 in investment decisions.

In the regression coefficient of investment motivation, if investment knowledge increases by one unit, then investment decisions will increase by 0.416, and vice versa; if one team decreases investment motivation variables, then investment decisions will decrease by 0.416. This is because investment knowledge is a significant factor in investment decisions.

Test The Correlation Coefficient (R) And The Coefficient Of Determination

Correlation Coefficient Test (R)

The research used the correlation coefficient test to determine the proximity between the independent and dependent variables, measured by the correlation coefficient (r). The SPSS software was employed to analyze the correlation between independent and dependent variables, summarized as follows:

Table 7. The relationship between X1 and Y

Literacy		Decision	
finance (X1)		Investment (Y)	
Financial literacy (X1)	Pearson Correlation1		.527**
	Sig. (2-tailed)		.000
	N	308	308
Investment Decision (Y)	Pearson Correlation	.527**	1
	Sig. (2-tailed)	.000	
	N	308	308

Data source : Appendix of SPSS analysis results

Based on the findings presented above, it has been determined that the value of the correlation obtained between financial literacy and investment decisions is 0.527. A

positive correlation value indicates that the relationship between the two is unidirectional. This is indicated by the fact that the correlation value is. At the same

time, the quality of investment decisions is directly proportional to financial literacy. According to the interpretation of the correlation coefficient, the value of 0.527

belongs to the category of very medium relationships. It falls within the interval class that spans from 0.40 to 0.59.

Table 8. The relationship between X2 and Y

Knowledge Investment (X2)		Decision Investment (Y)	
Investment Knowledge (X2)	Pearson Correlation	1	.672**
	Sig. (2-tailed)		.000
	N	308	308
Investment Decision (Y)	Pearson Correlation	.672**	1
	Sig. (2-tailed)	.000	
	N	308	308

The results revealed a correlation value of 0.672 between investment knowledge and investment decisions. This positive correlation signifies a unidirectional relationship, indicating that the quality of investment decisions is directly associated

with the level of investment knowledge. Interpreting the correlation coefficient, the value of 0.672 falls within the category of strong relationships, specifically within the interval class ranging from 0.60 to 0.79.

Table 9. The relationship between X3 and Y

Motivation Investment (X3)		Decision Investment (Y)	
Investment Motivation (X3)	Pearson Correlation	1	.749**
	Sig. (2-tailed)		.000
	N	308	308
Investment Decision (Y)	Pearson Correlation	.749**	1
	Sig. (2-tailed)	.000	
	N	308	308

Data source : Appendix of SPSS analysis results

The presented findings establish a correlation value of 0.749 between investment motivation and investment decisions. This positive correlation signifies a unidirectional relationship, where the quality of investment decisions directly relates to the level of investment motivation. Interpreting the correlation coefficient, the value of 0.749 falls

within the category of strong relationships, specifically within the interval class ranging from 0.60 to 0.79.

Test Coefficient Of Determination

The value of the adjusted R square illustrates the coefficient of determination, as depicted in the presented figure below:

Table 10. Table of Coefficient of determination

Type	R	R Square	Adjusted R Square	Error of the Estimate
1	.786a	.618	.614	.827

a. Predictors: (Constant), Total_x3, Total_X1, Total_x2

b. Dependent Variable: keputusan_Investasi

Data source : Appendix of SPSS analysis results

The analysis findings reveal an Adjusted R square value of 0.614. This indicates that the variables X, comprising Financial Literacy, Investment Knowledge, and Investment Motivation, collectively contribute 61.4% towards the dependent variable (Y), namely Investment Decision. The remaining 38.6% of the investment decision is attributed to factors beyond the scope of this study.

Hypothesis Test

F Test (Stimultan)

Basis of decision making:

1. If the significance level is less than 0.05, it can be concluded that there is a significant influence of variable X on variable Y.
2. It can be concluded that there is no stimulated effect of variable X on variable Y if the sig value is greater than 0.05.

Table 11. Table of Hypothesis Test

F count	F table	Sig.
158.546	2.6343	0.000

Data source : Appendix of SPSS analysis results

The table above presents findings indicating an F calculate value of 158.546 with a significance value of 0.000. Upon comparing the F calculate value (158.546) to the F table value (2.6343), it's evident that the F calculate value surpasses the F table value. Consequently, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. This signifies that Financial Literacy, Investment Knowledge, and Investment Motivation collectively exert simultaneous influence on Investment Decisions.

T-Test (Partial)

Basis of decision making:

1. If the sig value < 0.05 then there is an influence of variable X on variable Y.
2. If the sig value > 0.05 then there is no influence of variable X on variable Y. Here are the results of the statistical test t:

Table 12. Table of t-test

Variable	t count	t table	Sig.
Financial literacy	1.033	1.64981	0.303

Investment Knowledge	5.414	1.64981	0.000
Investment Motivation	10.184	1.64981	0.000

Based on the table above obtained from data processing using SPSS, the results can be explained as follows:

1. The Effect of Financial Literacy on Investment Decisions
The Financial Literacy variable (X1) indicates the sig value. 0.303 is greater than 0.05 ($0.303 > 0.05$) and tcount is 1.033 which means less than the value of ttable ($1.033 < 1.64981$). This means that the Financial Literacy variable (X1) has no partial effect on Investment Decisions.
2. The Influence of Investment Knowledge on Investment Decisions
The Investment Knowledge variable (X2) shows the sig value. 0.000 is less than 0.05 ($0.000 < 0.05$) and tcount is 5.414 which means greater than the ttable value ($5.414 > 1.64981$). This means that the Investment Knowledge variable (X2) partially has a significant positive effect on Investment Decisions.
3. The Effect of Investment Motivation on Investment Decisions
The Investment Motivation variable (X3) shows the sig value. 0.000 is less than 0.05 ($0.000 < 0.05$) and tcount is 10.184 which means greater than the ttable value ($10.184 > 1.64981$). This means that the Investment Motivation variable (X3) partially has a significant positive effect on Investment Decisions.

5. CONCLUSION

This study focuses on students enrolled in the Faculty of Economics and Business at Dr. Soetomo University Surabaya. The objective is to assess how their decisions on investments are impacted by their levels of financial literacy, investment knowledge, and investment motivation. The study comprised

308 participants who were students within the management study program at Dr. Soetomo University Surabaya.

Analyzing the research findings and discussions conducted by the researchers leads to the following conclusion throughout the entire thesis:

1. The multiple linear regression tests' findings illustrate a unidirectional relationship within the equation, evident from both the positive values of the constant and the variable coefficient.
2. The Jin test's outcomes, concerning the variables under scrutiny, refute the research by Bayu Purnomo Aji (2021), which suggests that financial literacy lacks a significant impact on investment decisions [28]. Instead, it establishes that Investment Knowledge and Investment Motivation significantly influence Investment Decisions. Ocka Fiani Triana's study (2022) emphasizes the substantial impact of investment knowledge [29], while Akhmad Darmawan's research (2019) underscores the noteworthy influence of investment motivation on investment decisions [5].
3. The F Test results affirm that, collectively, the variables of Financial Literacy, Investment Knowledge, and Investment Motivation significantly impact Investment Decisions.
4. The research findings highlight that among students attending FEB UNITOMO institutions, the variable of Investment Motivation stands out as the most influential factor in determining Investment Decisions.

Research Advice and Limitations

The objective is to enhance the faculty's capacity to offer investment-related facilities and activate an investment gallery. This initiative aims to bolster students' comprehension of investments, particularly in the capital market, thereby fostering greater interest in investment among students, particularly those within the Faculty of Economics and Business. The plan involves organizing activities aligned with

the investment gallery concept, such as workshops, investment training sessions for

high school students, and targeted events tailored specifically for Unitomo students.

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BIOGRAPHIES OF AUTHORS



Dr. Sri Handini, MM, with the functional position of Associate Professor, born in Madiun November 12, completed his Undergraduate Education Studies (S1) at the College of Finance Finance Concentration in Surabaya, Followed the Master of Management Program (S2) Finance Concentration at Gajah Mada University Yogyakarta, Continued the Doctoral Program (S3) at the University of August 17, 1945 by writing a Dissertation on Capital Market Finance. Her career in Education began in 1989 as a Permanent Lecturer at the Faculty of Economics and Business, Dr. Soetomo University and taught in the S1 Program, Master of Management Program and S3 Management Study Program. The subjects are Financial Management, Advanced Financial Management, Derivative Financial Management, Portfolio Theory and Capital Market, Financial Statement Analysis and Risk Management. As well as teaching at several private universities in Surabaya and as a researcher. The author can be contacted by e-mail at srihandini321@gmail.com