

# Financial Literacy and Demographic Effect on Investor Investment Decisions

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#### **A B S TRACT**

This research seeks to determine the impact of financial literacy, age, income, and ethnicity on overconfidence as intervening variable and investment decisions of investor in three major cities in Indonesia. This study employs quantitative research techniques of the associative variety. This study's participants resided in three major cities in Indonesia and had invested in equities. One hundred investors in Jakarta, Bandung, and Surabaya were selected as sample respondents using a technique of purposive sampling, yielding a sample size of 100. The respondent is at least 20 years old and has invested in equities for at least a year on the capital market. Results indicated that financial literacy, income, and semester had a positive effect on overconfidence, whereas age and ethnicity did not. Age, income, and ethnicity have no positive effect on investment decisions, whereas financial literacy does. Investment decisions are positively affected by overconfidence.

## 1. INTRODUCTION

In recent years, governments, financiers, employers, community interest groups, financial markets, and other organizations, especially in developed nations, have taken a greater interest in financial literacy. Due to the development of new financial products, the complexity of financial markets, and the evolution of political, demographic, and economic factors, the importance of enhancing financial literacy has grown. Financial literacy significantly influences an individual's ability to compare existing financial products or services and make the best financial decisions. Financial literacy encompasses both financial knowledge and the application of this knowledge. When making investment decisions, a person's financial conduct can be influenced by their financial literacy. Psychological factors such as overconfidence or excessive self-confidence can influence investor behavior, which is also inextricable from demographic factors because it reflects an investor's inherent characteristics (Hung et al., 2009).

Investors are one of the parties whose goals and activities Financial Literacy prioritizes. This is because Investors acted as frontlines, they can apply the theory they learn on campus to solve societal problems, and they are also considered intellectuals (Baihaqqy & Sari, 2020; Elias & Malini, n.d.; Koti, 2019; Waheed et al., 2020) Consequently, the function of students in the transformation of a nation is crucial and regarded as essential. This study evaluates the financial literacy of individual investors in the local financial markets. The report also investigates the impact of demographic factors, such as age, gender, education, monthly income, employment status, and work activity, on financial literacy. Additionally, the relationship between financial literacy and the impact of investment decision-making factors is examined.

Conducting research on investment decisions is crucial since it offers significant insights into the variables impacting people's judgements about financial assets. It is crucial to comprehend these choices for a number of reasons. First of all, it aids in the understanding of financial market dynamics by investors, financial advisors, and policymakers, empowering them to devise wise choices and workable plans. Second, researching investment choices advances the creation of financial theories and models, deepening our comprehension of how people behave in economically motivated situations. Additionally, by identifying trends, patterns, and risk factors linked to investment decisions, research in this field helps to facilitate investment planning and risk management. In the end, we can increase financial literacy, enable investors to reach their financial objectives, and support economic growth and stability by looking into investing decisions.

Time Period	Age group						
Thirt Ferrou	<19 y.o.	19-34 y.o.	35-54 y.o.	>54 y.o.			
2019	1.31%	69.95%	26.48%	2.26%			
2020	1.53%	66.38%	29.13%	2.96%			

Table 1.	Demographics of Investors (in Three big Cities of
	Jakarta, Bandung and Surabaya)

Source data: www.ojk.go.id

Table 1 presents data on the age distribution of investors in Indonesia three big cities, categorized into four groups: those aged over 19 years, those between 19 and 34 years old, those between 35 and 54 years old, and those over 54 years old. According to OJK data from 2019 to 2020, individuals below 19 years old constitute less than 10% of lenders, while those aged 19 to 34 years old make up approximately 60-70%. Lenders aged 35 to 54 years old represent around 25-29% of the total, and those over 54 years old also account for less than 10%. These statistics highlight the dominance of millennials, particularly those aged 19-34, as the most prevalent group of investors.

Financial literacy and demography are the two key research background factors impacting investing decisions. Because wise investing decisions include a solid grasp of financial principles, investment, risk, and fund management, financial literacy is an important component. Higher financial literacy levels are associated with better risk management and more intelligent investing choices. Furthermore, demographics are significant since traits like age, income, education, and prior investing experience can affect a person's investment goals, preferences, and risk tolerance. To help people, financial institutions, and governments create effective strategies to enhance financial well-being and lessen inequality in financial access and management, it is crucial to comprehend the relationship between financial literacy and demographics and investment decisions.

The Efficient Market Hypothesis (EMH) pertains to the achievement of equilibrium and information accessibility within a financial market for all participants. The attainment and accessibility of this knowledge may be hindered in

the absence of financial literacy among investors, leading to an inequitable absorption of information. Hence, this study holds significant importance in examining the impact of demographics on an investor's financial literacy and its subsequent influence on their investment decisions. The ultimate objective is to foster an efficient market characterized by optimal information dissemination.

## 2. LITERATURE REVIEW

A market is efficient when, regardless of investment strategy, the average return cannot exceed the risk-adjusted level. In the 1950s, Markowitz proposed the Modern Portfolio Theory. He investigates how decision-makers discover alternative investment opportunities and compares these opportunities by determining their relationship. Although not all investors are rational, the market must be rational, according to the Efficient Market Hypothesis (EMH) (Fama, 1991). Contrary to this theory, behavioral finance suggests that markets are not always economically efficient. Information In the same way that a company's primary objective is to generate a profit, an investor's primary objective is to make the most profitable decision possible. Others, however, rely on education and evidence rather than their own discretion (Malkiel & Fama, 1970).

According to (Chan et al., 2017; Gee, 1998; Mandell & Klein, 2009), the administration of healthy finances requires the development of several fundamental factors, including financial literacy. It is believed that financial literacy refers to an individual's knowledge of the existence of a financial institution, either in terms of the categories of products issued or the potential benefits and drawbacks of these products. A person is considered financially literate if, in addition to knowing the type of product, he understands how to use the financial products offered by financial institutions, such as banks, insurance companies, pawnshops, pension data institutions, and the capital market. Additionally, (Atmaningrum et al., 2021; Rasyid et al., 2018; Rochadiani et al., 2020) explained that both developed and developing nations must priorities financial literacy.

According to (Fernandes et al., 2014), each individual must consider financial literacy when comparing existing financial products or services and making the best financial decisions. finance in the community, particularly among investors, in an effort to increase the financial literacy of the general public. One of the parties for whom Financial Literacy prioritizes objectives and activities is investors. This is because students can serve as change agents. As the intellectual aristocracy of a nation, students are essential to its transformation. Mandell & Klein, (2009) Investors who believe that students can apply classroom theory to social issues. When confronted with societal problems, investors are expected to always think critically and offer solutions. Furthermore, (Malini & Nilam, 2022) argued that students should have Financial Literacy because they are educated and knowledgeable resources. Financial literacy encompasses a vast array of topics, including spending and credit, insurance, savings, and investments. Therefore, financial literacy is necessary for students to be able to invest, as those with limited financial knowledge are highly susceptible to investment schemes that promise high returns in a brief amount of time.

## 3. METHOD

Primary data was obtained by distributing questionnaires to 100 investors in Jakarta, Bandung, and Surabaya who had invested in stocks. There were multiple compelling reasons for choosing Jakarta, Bandung, and Surabaya as research subjects for financial literacy. First off, with sizable and varied populations, these three cities serve as hubs for Indonesia's financial and economic activities. With a vast number of businesses, financial institutions, and specialists in the financial sector, Jakarta, the capital of Indonesia, is the main business and financial hub in the nation. Both Bandung and Surabaya are important hubs of the economy, each with distinct traits and dynamics of the market. Second, because these three cities' populations are diverse in terms of social, economic, and educational backgrounds, they can offer a more complete picture of financial literacy in Indonesia.

Secondary data included: 1) data on the number of stock investors in Indonesia for 2019-2021 obtained from the IDX Representative Office in each city; and 2) data on the number of capital market investors in Indonesia obtained from the Indonesian Capital Market Investors Association.

Path Analysis Test (Path Analysis)

Path analysis is used to analyze the pattern of relationships between variables. This model aims to determine the direct and indirect effect of a set of independent variables on the dependent variable. Path analysis is an extension of multiple linear regression analysis or path analysis is the use of regression analysis to estimate the causal relationship between variables (causal model) that has been determined previously based on theory. The causal relationship framework can be made through the following structural equations:

 $Y1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + e_1....(1)$ 

 $Y2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + e2....(2)$ 

Remarks:

X1 = Financial Literacy 1 = Direct effect of X1 on Y1

X3 = Age 3 = Direct effect of X3 on Y1

X4 = Income 4 = Direct effect of X4 on Y1

X5 = Ethnicity 5 = Direct influence of X5 on Y1

Y1 = Overconfidence  $\beta$ 1 = Direct effect of X1 on Y2

Y2 = Investment Decision  $\beta 2 =$  Direct effect of X2 on Y2

 $e = Standard Error \beta 3 = Direct effect of X4 on Y2$ 

0,  $\beta$ 0 = Intercept  $\beta$ 4 = Direct effect of X5 on Y2

 $\beta 5$  = direct effect of X6 on Y2  $\beta 6$  = direct effect of Y1 on Y2

T test aims to show how capable an independent variable is in explaining the variation of the dependent variable. The hypothesis of the partial test in this study is as follows:

1 Ho = 0, meaning that psychological factors do not have a significant effect on investment decisions

Ho  $\neq$  0, meaning that psychological factors have a significant effect on investment decisions.

2 Ho = 0, meaning that demographic factors do not have a significant effect on investment decisions

Ha  $\neq$  0, meaning that demographic factors have a significant effect on investment decisions.

Testing each independent variable regression coefficient is said to have a significant effect on the dependent variable if the t count > t table or the significance probability value is <0.05. Then Ha is accepted and Ho is rejected, meaning that psychological factors and demographic factors influence investment decisions. Conversely, if the value of t count < t table or the significance probability value is > 0.05. Then Ha is rejected and Ho is accepted, meaning that psychological factors and demographic factors do not affect investment decisions.

The formula is written as follows:  $t = \beta n/S\beta n$ 

Where:

t = following the t function with degrees of freedom (df)  $\beta n$  = regression coefficient of each variable

 $S\beta n = standard error of each variable.$ 

The value of the coefficient of determination lies between zero and or one. The small value of R2 means that the ability of the independent variable to explain variations in the dependent variable is very limited. A value close to one means that the independent variables (independent variables) provide almost all the information needed to predict the variation of the dependent variable or dependent variable.

## 4. RESULT AND DISCUSSION

#### Result

Respondents' Responses to Financial Literacy Variables

The operational definition of the financial literacy variable in this study is a person's ability to be able to manage personal finances so that healthy and good financial behavior is obtained. The financial literacy variable in this study is measured in 3 indicators which refer to the characteristics of financial literacy itself including basic knowledge of financial management, credit management, and saving and investment management. The following are respondents' responses to the financial literacy variable

No	Questions	STS	TS	Ν	S	SS	Mean	Categorization
1	I maintain a daily/monthly/yearly							
	accounting of my cash inflow and	0	2	6	51	41	4.31	Very High
_	outflow (financial literacy)							
2	I am aware that the planning in finance	_	_					Very High
	are intended to alleviate financial	0	0	6	61	33	4.27	
	difficulties (financial literacy)							
3	When I want to have something but	1		16	27	10	4 1 5	Very High
	currently did not have the fund to	1	4	16	31	42	4.15	
	(financial literacy)							
4	(Intalicial interacy)							High
4	on my own financial situation and level	0	Δ	10	31	55	4 37	mgn
	of my trust to my acquaintance	0	-	10	51	55	т.57	
	(Demography)							
3	When I want to have something but currently did not have the fund to purchase it, I will not borrow money (financial literacy) I lend money to my acquaintance based on my own financial situation and level of my trust to my acquaintance (Demography)	1	4	16 10	37 31	42 55	4.15 4.37	Very High High

Table 1. Respondents' Responses to Financial Literacy Variables

5	I always set aside money for savings and feel that saving makes it easier to meet future needs (Demography)	0	0	7	51	42	4.35	Very High
6	I am fully aware that insurance can be used to save and invest (Demography)	0	3	11	54	32	4.15	High
Financial Literacy								Very High

Based on table 1, it can be seen that the average response with the highest value is item 4, namely I gave a loan to a friend based on my financial situation, with a value of 4.37, which is interpreted as very high. While the lowest average respondent responses are in items 3 and 6, namely when I want an item but don't have the money to buy it, I won't borrow money to buy it and I know insurance can be used to save and invest, the average of both items is 4.15, which is interpreted as high.

Overall, it can be surmised that respondents responded positively to all items of the financial literacy variable, with an average score of 4.26, which falls within the very high category.

## **Responses of Respondents to Variables of Overconfidence**

In this study, the operational definition of the overconfidence variable is the sensation of being overly confident in one's ability or knowledge to make an investment. This study measures the overconfidence variable using three indicators that refer to the characteristics of overconfidence, including above-average abilities, confidence in one's own abilities, and confidence in selecting investments. The following are the responses to the overconfidence variable from the respondents:

No	Questions	STS	TS	N	S	SS	Mean	Categorization
1	I am extremely confident in investment and put my fund into the financial market	0	0	14	56	30	4.16	High
2	I am highly confident in my ability to interpret and analyze stock price movements on the Stock Exchange.	0	3	20	50	27	4.01	High
3	I am confident in my capacity and ability to outperform market in terms of investment.	0	8	34	40	18	3.68	High
4	I am confident that the investment that Invest will be profitable.	0	4	14	55	27	4.05	High
5	I am confident and believe in the investment knowledge I possess over the years through learning and experiences	0	1	12	63	24	4.10	High
	Overconfid	4.00	High					

## Table 2. Respondents' Responses to Variables of Overconfidence

(Source: Processed Data, 2023)

It can be seen from table 2 that the highest average response is for item 1, "I have high confidence to invest," with an average value of 4.16, which corresponds to the high category. The item with the lowest average response is number 3, "I am confident in my ability to outperform other investors in terms of investment," with an average score of 3.68, which is still in the high category.

Overall, it can be concluded that respondents responded positively to all overconfidence variable items with a mean value of 4, which falls within the high category.

This study's operational definition of the investment decision variable is a choice between two or more investment alternatives with the expectation of future profit. In this study, investment decision variables are measured based on three indicators: return, risk, and time factor. These indicators refer to the characteristics of investment decisions, including return, risk, and time factor. The following are responses to investment decision variables from respondents

No	Questions	STS	TS	Ν	S	SS	Mean	Categorizat ion
1	I always put a priority level when selecting investment products based on return	0	0	7	57	36	4.29	Very High
2	I attempted to obtain various types of pertinent information from various parties in order to estimate my return in investment	0	1	9	49	41	4.30	Very High
3	Before making an investment decision and anything that related with investment, I investigated what would be the risk and return that I gain	0	0	8	43	49	4.41	Very High
4	I am able to reduce investment hazards through learning and anticipating by doing an analysis	0	0	10	59	31	4.21	Very High
5	I am confident in my ability to solve financial issues whether it is personally or something that related with investment	0	2	11	54	33	4.18	High
6	performing well in term of personal finance and in term of investing	0	0	10	55	35	4.25	Very High
Inve	estment Decision						4.27	Very High

#### Table 3. Respondents' Responses to Investment Decision Variables

Based on table 3, it can be seen that the highest average response is for item 3, namely, I research what I will receive before making investment decisions, with an average value of 4.41, which is classified as very high. While the lowest response is at item 5, I believe I can solve financial problems, with an average score of 4.18, which places it in the high category. Overall, it can be concluded that respondents responded positively to all investment decision variable items with an average score of 4.27, which is in the extremely high category.

## Linearity Test

Linearity test is used to see whether the specification of the model used in a study is correct or not. Two variables can be said to have a linear relationship, if the significance value is Deviation. From Linearity is greater than > 0.05. The results of the linearity test in this study can be seen in table 4 below:

Variable	Sig. Deviation from Linearity	Remarks	
Financial Literacy	0,884	Linear	
Demografi Factors	0,105	Linear	
Overconfidence	0,130	Linear	

#### Table 4. Linearity Testing

Source: Data Processing (2023)

According to the results of the linearity test presented in Table 4, the significance value of Deviation from Linearity for

each variable exceeds > 0.05. Thus, this study's independent and intervening variables can be concluded to be linear.

## Test for Determination Coefficient (R2)

The coefficient of determination assesses the extent to which the model can account for the variation in the dependent variable. The coefficient of determination has a value between 0 and 1. A value close to one indicates that the independent variables (independent variables) provide nearly all of the necessary information to predict the variation of the dependent variable (dependent variable). The results of this study's test for the coefficient of determination are shown in Table 4.

## Table 4. Overconfidence Determination Coefficient Test Results

## **Model Summary**

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.542ª	.294	.248	2.514
a Predictors:	(Constant), Fir	ancial	Literacy, Age, In	come, Etnis

According to the preceding table, R2 (R square) equals 0.294, or 29.4%. This indicates that the percentage contribution of financial literacy, age, income, ethnicity has an effect on investment decisions of 29.4%, while the remaining 70.6% is influenced by factors that were not examined in this study.

#### Path Analysis

In this case, two equations are formed:

Overconfidence =  $\Box$  + p1 Financial Literacy + p2 Age + p3 Income + p4 Ethnicity + e1 (1)

Investment Decision =  $\Box$  + p7 Financial Literacy + p9 Age + p10 income + p11 Ethnicity + p12 Semester + p13 Overconfidence + e2

### Initial Structure

The first substructure analyses the relationship between financial literacy (X1) and demographic factors (X2) and overconfidence (Z). The obtained results are displayed in table 6 below:

Model		Standardized Coefficients Beta	t	Sig.	
1	(Constant)		3.870	.000	
	Financial Literacy	.465	5.142	.000	
	Age	086	934	.353	
	Income	303	-3.274	.001	
	Ethnicity	125	-1.368	.174	

## Table 6. Significance of Overconfidence Test Results

a Dependent Variable: Overconfidence

Source: Data Processing, 2023

The SPSS output results provide a non-standardized beta value for financial literacy in equation (1) as a path p1 value of 0.438 and a significance value of 0.000, indicating that financial literacy influences overconfidence. The unstandardized beta for age is -0.665, which corresponds to a p3 value of 0.353, indicating that age has no effect on overconfidence. The unstandardized income beta value of -1.117 represents the path value or path p4, and the significance value of 0.001 indicates that income influences overconfidence. The ethnicity beta value is -0.309, which corresponds to the value of the p5 path, and the significance value is 0.174, indicating that ethnicity has no effect on overconfidence.

No	Direct Influence	Value	Indirect Influence	Value	Total Influence
1	Financial literacy on investment decisions (P8)	0,590	Financial Literacy against decisions investment through overconfidence (P1) x (P7)	0,14892	0,73892
2	Decision age (P10) on investment	0,378	Age on investment decision through overconfidence (P3) x (P7)	ns -0,2261	0,1519
3	Income on investment decisions (P11)	0,170	Income on investment decision through overconfidence (P4) x (P7)	ns -0,37978	-0,20978
4	Ethnic decision (P12) on investment	-0,228	Ethnicity against investment decisions throug overconfidence (P5) x (P7)	-0,10506 gh	-0,33306
5	Overconfidence on investment decisions (P7)	0,340		-	-

## Table 10. Direct Influence and Indirect Influence

Interpretation of Path Analysis

The relationship between variables from the SPSS output results can be described in the following regression equation:  $Y_1 = 10,634 + 0,438X_1 + 0,356X_2 + (-0,665) X_3 + (-1,117) X_4 + (-0,309) X_5 0,697X_6 + e1$ 

- 1) A constant value (a) of 10.634 means that if the variables of financial literacy, age, income, ethnicity are equal to 0, then the effect on overconfidence is 10.634.
- 2) 0.438X1 means that every change or increase in the financial literacy variable is 1 unit, so the effect on overconfidence is 0.438.
- 3) -0.665X3 means that for every change or increase in the age variable by 1 unit, the effect on overconfidence is 0.665
- 4) -1.117X4 means that every change or increase in the income variable by 1 unit, the effect on overconfidence is 1.117.
- 5) -0.309X5 means that every change or increase in the ethnic variable is 1 unit, the effect on overconfidence is -0.309.





#### Discussion

According to the analysis, financial literacy (X1) has a positive direct significant influence on overconfidence. This is correct because the significance value is less than 0.05 of the error levels which is 0.000. These results indicate that a person's level of financial literacy influences their overconfidence. Literacy is one of the factors that influence overconfidence. The level of financial literacy possessed by investors can impact their confidence levels. This is due to the fact that a higher level of information instills a sense of confidence in investors, enabling them to make informed decisions based on their acquired knowledge.

The more financially literate a person is, the greater his or her level of arrogance. In contrast, a dearth of financial literacy will diminish one's self-assurance. This indicates that the hypothesis H1 that financial literacy (X1) has an effect on overconfidence (Y) is supported. Based on the findings of the analysis, it was determined that the age variable (X2) had no direct impact on Investors' overconfidence. Those who are older have had more time to deal with the challenges of life and have developed their emotional intelligence, sense of responsibility, and decision-making abilities. As such, they typically display higher levels of maturity in comparison to younger folks who might not have had as many life experiences or possibilities for personal development (Hamza & Arif, 2019; Mandell & Klein, 2009; Waheed et al., 2020).

The significance value of the age variable's SPSS output is not near to 0.05 and exceeds the error level (), which is 0.353 This means that age doesn't matter significant. It is difficult to estimate a person's level of overconfidence based on their age; every investor has behavioral biases that are difficult to prevent regardless of age. Therefore, H3 is refuted, which asserts that age (X3) influences overconfidence (Z). The findings suggest that while age does influence an individual's level of maturity, it cannot be definitively concluded that younger individuals lack the capacity to make sound financial decisions, provided they possess sufficient financial literacy.

According to the outcomes of the analysis, Investor's overconfidence was influenced by their income (X3). This is predicated on the fact that the significance level of 0.001 is less than the error level of 0.05. with a high income, an investor will be more willing to act because they believe there are still sufficient funds to guarantee the return of any lost funds. However, as shown in the table 10, respondents with higher incomes are less likely to be overconfident than those with lower incomes. Thus, H4 which indicates income affects overconfidence investors is accepted. The findings of this study indicate that when respondents have a high income, they consider investment decisions more attentively and reduce their level of overconfidence. This is supported by the findings of a study conducted by (Hani et al., 2020),

which found that a higher income would result in less overconfidence when making investment decisions. According to research conducted by (Hamza & Arif, 2019), the higher a person's income, the more overconfident they are.

An analysis of the ethnic variable (X5) revealed that it has no effect on investor overconfidence. This conclusion is supported by the significance value of 0.174, which is greater than the significance threshold of 0.05. These findings disproved Hypothesis 5, which held that ethnicity influences overconfidence. Certain ethnic groups possess the ability to exercise authority over financial matters due to their acquisition of financial literacy, particularly in the domains of savings and wealth generation. Certain indigenous communities also exhibit proficiency in investment practices due to their early exposure and experience in the field of investment.

This is inversely proportional to research conducted by (Carretta et al., 2017), which indicates that cultural factors influence a person's financial management and investment decisions. Culture is a manifestation of ethnicity, so certain ethnic groups can have a distinct culture, characteristics, and self-confidence compared to other ethnic groups. However, culture cannot be used to gauge an investor's arrogance. The reason for this is that culture is an abstract concept that can be acquired through learning, hence rendering it unsuitable as a determinant for assessing the impact of culture on investors' decision-making abilities.

Based on the outcomes of the variable analysis (X1), it affects the investment decisions of investors in Indonesia's three largest cities. A significance value of 0.00, which is less than 0.05, supports this conclusion. Comprehending financial concepts, understanding financial products, and applying financial knowledge are indicators of financial literacy. The higher an individual's financial literacy, the more informed his decisions. Therefore, H7 is accepted, which asserts that investor investment decisions are influenced by financial literacy. These results are consistent with (Oppong et al., 2023), who discovered that financial literacy has a substantial influence on investment decisions. This suggests that the greater an investor financial literacy, the greater their ability to make investment decisions that will result in better financial decisions.

The results imply that a key factor in lessening information asymmetry across variables or parties is signaling theory. Management can influence investment returns by telling investors about the company's worth through strategic communication. Whether company information is a good or negative signal depends on how it is analyzed and interpreted. When a company receives positive signals, investors respond favorably and recognize it as qualified, which raises the stock price and corporate value at the same time. On the other hand, negative signals cause the volume of investments to decline, which in turn affects the overall value of the company. As a result, efficient signaling systems have a big impact on business performance and investment choices.

#### **5. CONCLUSIONS**

According to the study's findings, the coefficient of determination for the first path demonstrates a value of 29.4%, indicating that there is still a chance that other variables influence overconfidence, and the coefficient of determination for the second path demonstrates a value of 65.0%, indicating that there is still a chance that other variables influence investment decisions. Therefore, the researcher suggests that future researchers include additional indicators for demographic factors related to students, such as grade point average, place of origin, and religion, among others. In addition, it is suggested that researchers select a mediating variable other than overconfidence.

Based on the results obtained from the current study, it is recommended that financial education providers, investors, policy makers, and regulatory bodies actively support the enhancement of financial literacy. By increasing an individual's level of responsibility, there exists the possibility of expanding the variety of financial products and services accessible to them. The financial services industry has attracted considerable attention from a range of stakeholders, including educators, community groups, businesses, government agencies, organizations, non-governmental organizations, policy makers, and regulatory authorities. This interest stems from the concepts of innovation, globalization, privatization, and deregulation, which have had a profound impact on the industry. Additionally, the complex nature of financial products, technological advancements, and market innovations have further contributed to the significance of these concepts.

Investors must engage in ongoing self-education to remain informed about emerging information within the dynamic financial industry. This is crucial given the industry's constant evolution. Moreover, it is essential for investors to strike a balance between confidence and moderation, avoiding excessive risk-taking. It is imperative for investors to possess confidence in their ability to make financial judgments by employing both fundamental and technical market analysis. Additionally, it is crucial for investors to refrain from blindly following investment trends that transpire in the market, as such patterns are typically transient in nature. Hence, possessing sufficient and self-assured financial literacy as an investor is crucial in establishing an optimal market equilibrium.

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