

# HASIL CEK\_U Do financial literacy

*by Rintan Nuzul Ainy Akuntansi*

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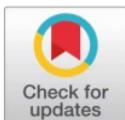
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## Do Financial Literacy and Technology Affect Intention to Invest in the Capital Market in the Early Pandemic Period?

Nabila Na'ma Aisa



### AFFILIATION:

Department of Accounting, Faculty of Economics and Business,  
Universitas Ahmad Dahlan, Special Region of Yogyakarta, Indonesia

### \*CORRESPONDENCE:

nabila.aisa@act.uad.ac.id

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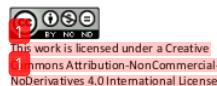
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### Abstract:

**Research aims:** This paper discusses the effect of financial literacy and automatic investment technology on intention to invest in the capital market during the early pandemic.

**Design/Methodology/Approach:** The research population was students studying economics and finance in institutions located in Yogyakarta Special Region Province. The sample of 384 respondents was obtained through questionnaires distributed online. To test the impact of financial literacy and automatic investment technology on intention to participate in the capital market, multiple linear regression was used.

**Research findings:** The researchers found that financial literacy and automatic investment technology affected students' intention to invest in the capital market. The number of students with a moderate level of financial literacy score dominated, followed by the students with low and high literacy scores. Besides, students' background in economic and finance appeared inadequate to solely determine the financial literacy score.

**Theoretical contribution/Originality:** This paper contributes to the investment area, especially related to the automatic investment technology "Robo advisor," that is still rarely studied yet, which will be a significant issue in the future. It also provides empirical results, which explain the investment intention through financial literacy. Moreover, this study was conducted during the massive growth of investors in Indonesia during the pandemic.

**Practitioner/Policy implication:** This study provides a useful reference to the financial sector, especially the capital market. Inclusive programs regarding financial literacy should be expanded for wider society to enhance their knowledge and dismiss lack of confidence in capital market participation. Private sectors providing automatic investment technology are suggested to continue developing a more convenient application to be accessible by a broader range of society.

**Research limitation/Implication:** The research included only students as the sample; hence, further research may use a larger area of the sample with various backgrounds and ages. Other determinants, such as norms, environment, risk, and more advanced financial literacy measurement, can also be added to enrich future studies and literature.

**Keywords:** Financial Literacy; Technology; Intention; Investment; Capital Market

## Introduction

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The capital market is a part of the financial sector that is prevailed by the development of the digital economy. In the past, the capital market was perceived as a terrain where only individuals and institutions with investment literacy were registered as investors. Nowadays, the capital market seems more accessible to everyone with the internet and digital platforms. The Indonesia Stock Exchange (2018) recorded an annual increase of investors by 44% into 1,619,372 investors. The Indonesia Central Securities Depository (ICSD) data also showed a sharp rise of new investors by 56.21% from 2019<sup>9</sup> to 3,880,753 in 2020 (KSEI, 2020). It portrays the increasing intention to participate in the capital market, particularly during the pandemic.

The intention to invest growing massively among society leads to a swift escalation of investor number in the capital market. This phenomenon is also a consequence of the rapid growth of financial technology (Das & Ali, 2020). At the early pandemic, the number of investors performing daily transactions had sloped upwards by 82.4% from March 2020 to July 2020 (KSEI, 2020). In 2019, ICSD initiated an online account opening simplification program and invited 128,593 new investors (KSEI, 2019). It was also reported that 54.60% of the investors invested through fintech companies in 2020 (KSEI, 2020).

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Akhtar and Das (2019) stated that financial knowledge is vital to predicting intention to invest. Many studies support that financial literacy is substantial in influencing personal investment decisions (Abdeldayem, 2016; Fitria et al., 2019; Mouna & Anis, 2017). Based on the national financial literacy and inclusivity survey conducted by Financial Service Authority (2017), the public knowledge about capital market products and services climbed up to 9.8% in 2016. Despite the escalation in literacy, participation in the capital market in 2016 only reached 1.1%. In this case, Mouna and Anis (2017) found a significant influence of financial literacy on investment behavior. Lack of literacy directs people to a smaller extent of capital market participation. People with inadequate financial knowledge are also deemed to be less likely to own shares.

Moreover, ICSD reported that the investor demography was dominated by young people aged 21-30 by 54.9%, who were students and early workers starting their careers generally (KSEI, 2020). Interestingly, many students have contributed significantly to the recent acceleration of the number of investors; hence, the present study focuses on students as research objects. IDX has also been striving to ensure accessibility and deepen the market to students. About 412 IDX investment galleries were established, mostly in universities throughout Indonesia. Students have been directed to open an investment account, and their awareness of investment has increased as a consequence. In addition, the young generation known and popular as Millennials are also exposed to the internet and technology. "Yuk nabung saham!" campaign, capital market communities, social media, and financial technology (fintech) are available for all kinds of society and accessible by students.

<sup>7</sup> study by Yusuf (2019) asserted that technology significantly affected students' investment decisions in the capital market. The development of online trading and mobile trading opens greater access and eases people to start investing. Nowadays, the massive growth of fintech has become an essential factor in the upsurge in people participating in the capital market (Das & Ali, 2020). Besides, many fintech companies in Indonesia have recently adopted "Robo advisor," or automatic investment technology, such as Bibit, and has already been listed by Financial Service Authority (Financial Service Authority, 2021). It omits the barrier of potential investors with less investment literacy and limited capital without having to learn and understand the whole investment scheme in the capital market. However, research on this Robo advisor is still rare and needs to be studied further.

<sup>41</sup> Therefore, the present study <sup>20</sup> is designed to examine the influence of financial literacy and technology on intention to invest in the capital market. The researchers developed the study by Fitria et al. (2019) and Yusuf (2019), which looked into the effect of technology advancement and investment knowledge on the investment decision. The technology discussed in the previous study was limited only to the existence of an online trading system. Thus, the researchers attempt to cover the research gap by incorporating automatic investment technology "Robo advisor," which is new and will be a significant issue in future investing as the independent variable. The result provides insight into factors affecting intention to invest and enriches the literature for better practice in the financial industry, especially capital market stakeholders and financial technology companies.

## Literature Review and Hypotheses Development

### Intention to Invest

As pointed out by Ajzen (1991), the intention is a motivational determinant that affects behavior, which involves the effort to perform a behavior. He developed a conceptual framework explaining intention to perform behavior known as Theory of Planned Behavior (TPB). Human behavior is assessed through several determinants, such as attitudes, subjective norms, and perceived behavioral control. Further explained, attitudes size the self-assessment on the behavior. Subjective norms express the tolerance to act with the behavior considering the social pressure. The last determinant, perceived control over the behavior, relates to the difficulty of carrying out the behavior. Meanwhile, East (1993) described intention as a situation in which people are willing to take action activated by perceived opportunities. He conducted a study to examine investment decisions based on the opportunity and information possessed.

Previous researchers have examined various factors influencing intention to invest. Cuong and Jian (2014) identified psychological factors affecting investment intention: overconfidence, excessive optimism, psychology of risk, and herd behavior. Sivaramakrishnan et al. (2017) modified the perceived control of TPB into financial literacy and connected it to the investment decision. Many other studies associating

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financial literacy with intention and behavior have been conducted in developed and developing countries across the world, such as USA, Netherlands, UEA, Bahrain, India and Vietnam (Abdeldayem, 2016; Lusardi, 2019; Lusardi & Mitchell, 2014; Mishra, 2018; Nguyen & Nguyen, 2020; Van Rooij et al., 2011).

Along with digitalization, Yusuf (2019) revealed the positive effect of technological advancements and knowledge on the interests of young people in investing in the Indonesian capital market. Tandio and Widanaputra (2016) have also attempted to investigate the students' interest to invest by employing technological advancement as one of the factors but found no significant influence. However, Gomber et al. (2017) mentioned limited studies concerning the impact of automated tools as in Robo advisor for financial advice and recommend later research to dig deeper. Thus, the present study explores further the Robo advisor's influence on the intention to invest.

### Financial Literacy

Perceived behavioral control of TPB refers to one's control to perform behavior based on the resources one owns (Madden et al., 1992). If people think they have higher opportunities and resources, perceived control is greater and more likely they perform on behavior. East (1993) later applied TPB by inserting knowledge as an important resource in the body of perceived control. The control belief as a determinant of perceived control covers the respondent's knowledge about the issue and the availability of the knowledge. Further, Sivaramakrishnan et al. (2017) attached financial literacy to represent perceived behavioral control to examine capital market participation. Hence, the 50 researchers incorporate financial literacy representing perceived control to predict intention to invest in the present study.

Financial literacy comprises two elements: knowledge and application or financial behavior (Huston, 2010; Lusardi, 2019). Knowledge refers to understanding general financial knowledge, while application attributes to the confidence degree of an individual to actually perform and apply 31 knowledge to create a financial-related decision. Financial literacy contributes to financial decision-making (Van Rooij et al., 2011).

According to Financial Service Authority (2017), the financial literacy index comprises knowledge, skill, belief, attitude, and behavior as important factors for decision making and financial management to attain welfare. Additionally, it states that financial literacy implies a country's economic growth. In this case, students and the young generation are listed as one of the ten group national financial literacy and inclusion activity targets.

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Van Rooij et al. (2011) asserted a relationship between stock participation and financial literacy. People with low financial literacy presumably do not invest in the capital market. Mouna and Anis (2017) also presented a significant influence of financial literacy on investment behavior. Lack of literacy directs people to a smaller extent of capital market participation. People might be unsure whether it is favorable to invest in the capital market concerning personal concerns. Hence, those with inadequate

knowledge of finance are deemed less likely to own shares. Besides, Abdeldayem (2016) found that people with higher literacy on finance retain higher awareness of a financial product.

Further, financial and investment knowledge changes positively influence investment decisions among students and <sup>16</sup> the millennial generation (Fitria et al., 2019; Yusuf, 2019). Hassan Al-Tamimi and Anood Bin Kalli (2009) assessed the financial literacy of the UAE individual investors and showed a significant relationship between financial literacy and investment decisions. Moreover, wider investment knowledge is necessary for an individual to raise awareness and interest in the capital market. The better the knowledge of investing in the capital market, the more interested they are in it. Given strong financial understanding, individuals will have a larger possibility to gain profit and create more value rather than experience possibly large losses having capital market investments (Yusuf, 2019). Hence, the first hypothesis was developed as:

<sup>46</sup>  
*H<sub>1</sub>: Financial literacy positively affects intention to invest in the capital market.*

#### Automatic Investment Technology “Robo Advisor”

<sup>51</sup>  
According to Iannotta et al. (2007), Robo advisors are “automated investment solutions which provide automated portfolio rebalancing using trading algorithms based on passive investments and diversification strategies, which engage individuals with digital tools featuring advanced customer experience, to guide them through a self-assessment process and shape their investment behavior towards rudimentary goal-based decision making”.

Robo advisor is also a recent financial service development in digital investing based on user's data personified by investment goals, financial background, and risk profile (Gomber et al., 2017). Robo advisor provides technology that automatically contrives an optimal investment portfolio (Bibit, 2018). Gomber et al. (2017) added that the technology is utilized for portfolio management and investment strategies. It is a later product from the modern portfolio theory developed by Harry Markowitz, a Nobel winner.

Fintech companies, large investment funds, and banks have used Robo advisor in many countries (Statista, 2021). The technology also has been adopted by several fintech companies in Indonesia, such as Bareksa and Bibit, who had been licensed as mutual funds agents by Financial Authority Service (Bareksa, 2021; Bibit, 2018; Financial Service Authority, 2013). Fintech companies contributed to better financial services (Das & Ali, 2020). The use of technology enables the users to invest in mutual funds with the portfolio recommendation provided in the application. The initial investment is considerably small, making it affordable for students in investing activity.

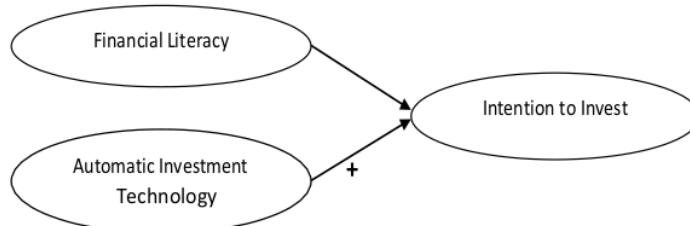
According to Brenner and Meyll's (2020) research, people who most likely use Robo advisor are young since they own relatively low portfolio values and lack funds

reasonably. D'Hondt et al. (2020) added that investors' earning low income and education benefit the most from Robo advisor. Tandio and Widanaputra (2016) included the availability of technology such as online trading and the ability of the mobile trading system to transform capital market investment into ease for students. In addition, Yusuf (2019) found that technology advancement positively affected the investment of young generations. He mentioned indicators commonly used to measure the easiness and convenient technology.

Furthermore, the capital market investment was deemed complex by common people long ago. Today, fintech and security companies provide online trading and mobile banking systems to ease society, including students. Moreover, the latest technology, "Robo advisor," is quite attractive for people with less literacy on investment by providing portfolio recommendations. The Robo advisor is expected to drop the barrier of limited knowledge and investment dealt by many people regardless<sup>2</sup> of their backgrounds. It can also save potential investors time, money, and energy to invest in the capital market. The availability of facilities and infrastructure makes it easy for students to invest in the capital market. Hence, the second hypothesis was developed as below:

**H<sub>2</sub>:** Automatic investment technology positively affects intention to invest in the capital market.<sup>13</sup>

Figure 1 depicts the model of this research.



**Figure 1.** Research Model

## 17 Research Method

This research was conducted involving students in Yogyakarta. The development of fintech targets young people, which is a sufficient rationale to investigate students as a research subject. The researchers considered focusing on students as they generally have not earned money from formal work; hence, they are similar financially. Moreover, Yogyakarta has been acknowledged as the center of education, where 36 IDX investment galleries are established and spread in many universities in the region.

The researchers conducted an online survey to collect the data. The researchers used a self-administered questionnaire containing several elements assessing financial literacy, automatic investment technology, and investment decision. The online questionnaire was distributed to students with economic and financial backgrounds currently registered in universities or colleges in Yogyakarta Province to avoid educational background bias and examine more on the financial literacy among students studying economics and finance.

The sampling technique used was convenient sampling as it gives benefits some constraints, such as time, place, resources, and conditions during the early pandemic. The researchers followed the rules of thumbs of Roscoe, claiming that a minimum of 30 samples and less than 500 samples is appropriate and preferably ten times larger than the number of variables (Sekaran & Bougie, 2016). The researchers distributed the questionnaire voluntarily to respondents and provided questions clearly describing the respondents' demographic. The researchers made sure the responses used were within the targeted research subjects. As a result, the researchers collected data from 384 respondents as the sample received from July to August 2020.

<sup>28</sup> To investigate the effect of financial literacy and technology on investment decisions, the researchers also followed previous relevant studies to employ a multiple regression model following a similar study by Fitria et al., 2019, Tandio and Widanaputra (2016), and Yusuf (2019), and adjusted it to the present variables. The research equation formula as follows:

$$\text{INT} = \beta_0 + \beta_1 \text{FL} + \beta_2 \text{TECH} + \epsilon \quad (1)$$

Where: INT= Investment decision; FL = Financial literacy; and TECH = Automatic investment technology.

<sup>25</sup> According to Ajzen (1991), intention to invest is a motivational determinant that affects behavior, which involves the effort to perform a behavior to invest in this study. The researchers used 5 points Likert scale to measure several items, namely intention to invest and the interest to practically invest in the capital market, following previous studies by East (1993), added with eagerness to learn about investment from Yusuf (2019).

<sup>10</sup> Financial literacy was assessed referring to several elements, namely interest rate, inflation, and risk diversification, by Lusardi and Mitchell (2007, 2008). They are basic questions that show respondents' knowledge about general financial management and investment. To calculate the score as reported in Financial Service Authority (2013), the researchers followed Bumcrot et al. (2012), who employed a simple weight method in determining the financial literacy index. Each question was given equal weight.

Meanwhile, automatic investment technology represents the respondents' perception of the automatic investment technology advancement. The researchers used 5 points Likert scale to measure several indicators featured in the automatic investment

technology, such as availability, easiness, usefulness (Venkatesh et al., 2012; Tandio & Widanaputra, 2016; Yusuf, 2019).

The questionnaire<sup>23</sup> was pilot tested among ten respondents first. The researchers included validity and reliability tests. A validity test was used to test whether a questionnaire is valid. A questionnaire should reveal something that the researcher will measure. A reliability test can be seen by the consistency of the respondent to answer the question. If Cronbach's alpha value is more than 0.6, the questionnaire is considered valid.

## Result and Discussion

### Demography Data

<sup>34</sup> The questionnaire was designed to gather information about the basic profile of the respondents as an introductory. Table 1 shows the demography of 384 respondents regarding sex, age, source of income, and experience in capital market investment. The number of female respondents by 62.76% almost doubled the number of male respondents by 37.24%. Students in their early college stage (17-20 years old) contributed the biggest data by 63%. The number was followed by students ranging between 21-23 years old by 32% and 24-27 years old by 4.7%. Only a small number of respondents were more than 27 years old.

About 82.55% of the students received financial support from their parents. Some students were reported working full time by 2.08% and part-time by 2.35%. Self-employed students as entrepreneurs were 0.78%, and 12.24% of the respondents earned financial support from other sources of income. It can be implied they were in a similar economic background with limited income, mostly from their parents only. The availability of funds, nonetheless, is important in investment behavior.

The largest portion of respondents was recorded not to have such experience, amounting to 63.3%. About one-third of the respondents have started investing in the capital market in less<sup>19</sup> than six months. Considering the data collection time, 30.46% of the students started investing in the capital market during the pandemic when the university closed and school from home started. Only 4.68% of the students had invested between six<sup>8</sup> months to 11 months, and 1.56% of them had been investing for more than one year. It can be seen that many of the respondents have not experienced investing in the capital market. About one-third of the students started to invest when the pandemic hit, and they contributed to the acceleration in the number of investors during 2020 dominantly by young people (KSEI, 2020).

**Table 1** Respondents' Demography

	Demography	Percentage (%)
Gender:		
Male		37.24
Female		62.76
Age:		
17 - 20 years old		63
21 - 23 years old		32
24 - 27 years old		4.7
≥ 27 years old		0.3
Source of income:		
Parents		82.5
Business		0.78
Full-time work		2.08
Part-time work		2.35
Others (scholarship, etc.)		12.24
Experience in capital market investment:		
N = 38		63.30
< 6 months		30.46
6-11 months		4.68
1-3 years		1.56

**Validity Test and Reliability Test**

The dependent variable and one of the independent variables, namely intention to invest and automatic investment technology, were measured using the Likert scale. Table 2 and 3 summarize the results of the validity and reliability tests. All items constructing the tested variables were resulted to be valid and reliable.

**Table 2** Validity Test

Variable	Items	Validity Test		
		Pearson Corr.	Sig.	Validity
Intention to invest	Awareness of capital market existence	15	0.762	0.000
	Intention to invest in capital market	INT_1	0.781	0.000
	Eagerness to learn steps to invest	INT_2	0.766	0.000
	Eagerness to collect information about types of investment products	INT_3	0.694	0.000
	Interest to invest because of beneficial information about the investment	INT_4	0.731	0.000
	Refusing to invest in the capital market one year ahead	INT_5	0.418	0.000
Automatic investment technology (AIT)	The existence of AIT attracts intention to invest in the capital market.	9	0.804	0.000
	Easiness of AIT to help invest	TECH_1	0.854	0.000
	AIT's safety and convenience	TECH_2	0.725	0.000
	Accessibility for a wide range of users to invest using AIT	TECH_3	0.814	0.000
	Impact of AIT feature on peoples' intention to invest	TECH_4	0.785	0.000
	The insignificance of AIT existence	TECH_5	0.439	0.000

**Table 3** Reliability Test

Variable	Reliability Test	
	Cronbach Alpha	Reliability
Intention to invest	0.773	Reliable
Automatic investment technology	0.816	Reliable

**Measuring Financial Literacy**

<sup>49</sup> A set of financial literacy questions should adhere to four principles, namely simplicity, relevance, brevity, and <sup>30</sup> capacity to differentiate (Lusardi & Mitchell, 2014). Hence, the researchers used the financial literacy questions constructed by Lusardi and Mitchell (2007, 2008). Referring to the same constructs, the researchers followed Putra et al. (2016) and adjusted the questionnaire to meet fundamental elements of financial literacy (Table 5). A similar concept of the questions was also used and reported by Financial Service Authority (2013) to measure financial literacy in Indonesia. The researchers provided a questionnaire that included basic financial concepts, saving and borrowing, insurance, and investment. These elements are important knowledge for personal financial management.

The basic financial concept as the first element was represented in FL1 and FL2. Less than 10% of the respondents had incorrect answers, meaning they understood the basic concept of money exchange and the general relationship between interest rate and investment.

The second element concerning saving and borrowing was stated in FL3 and FL4. A larger group of the respondents, by 73.70%, had correct answers about the cost of a long-term loan cost, which was higher as the term was longer. However, only half of the students knew that the maximum amount of consumptive loan was 35% of income. However, 43.50% of them answered incorrectly. It implies a lack of knowledge regarding the loan in particular. It is important to know the maximum loan level considered safe in personal finance. The higher the loan portion, the lesser money available for investment. Meanwhile, intention to invest is much influenced by the availability of funds (East, 1993).

The third element is insurance, incorporated in FL5 and FL6. Most of the students, amounting to 89.32%, had correct answers regarding transfer risk to insurance function. About 77.10% of them also knew that a certain amount of money should be paid as the obligation to the insurance company called premium, not interest. These answers described the students' familiarity with insurance as one of fundamental in financial planning. Chieffe and Rakes (1999) proposed an integrated model for financial planning, describing insurance as the current period and investment as the future period. Knowledge on insurance is as substantial as knowledge on investment as both together create ideal financial planning.

The fourth element is an investment embodied in FL7, FL8, FL9, and FL10. These questions comprised knowledge about risk and return, investment in gold, investment in the capital market, and the correlation between investment and export policy. The

respondents had almost equal correct and incorrect answers related to investment. The data revealed that about half the students had not excelled comprehension about investment. However, the majority successfully answered the question about risk and return. It implies that students were preoccupied with basic investment knowledge yet still uninformed of advanced investment knowledge.

Moreover, in Table 4, the average students' financial literacy score was moderate by 7.07 and achieved by 51% of the respondents. About 17% were identified with high financial literacy, and 33% performed low financial literacy.

**Table 4** Financial Literacy Scores

Mean	Maximum	Minimum
70.7	100	20
Low	Moderate	High
33%	51%	17%

Fourteen students achieved the highest score of 10, representing 4% of the respondents, while only one got the lowest score of 2. Having the respondents' study background of economic and finance, the data showed that not all those students excelled in the financial literacy test (Table 5). Research by Lusardi et al. (2010) has shown many factors, such as cognitive ability, family background, and peer characteristics, influencing the financial literacy of young adults. Even though the respondents are from similar educational backgrounds, they may perform differently on those factors, thus creating a variation in financial literacy score. Future studies may continue to examine this matter deeply.

**Table 5** Financial Literacy Question Items

Item	Description	Correct (%)	Incorrect (%)
FL1	Exchange rate from dollar to rupiah	93.75	6.25
FL2	Interest rate and investment	96.35	3.65
FL3	Long-term loan cost	73.70	26.30
FL4	The maximum amount of consumptive loan	56.50	43.50
FL5	The function of insurance	89.32	10.68
FL6	The element of insurance	77.10	22.90
FL7	Interest rate and gold investment	40.36	59.64
FL8	Stock price during the pandemic era	43.50	56.50
FL9	Risk and return	90.89	9.11
FL10	Export policy and stock investment	45.60	54.40

#### Hypothesis testing results

The regression results in Table 6 reveal several important findings to be further discussed. The first independent variable was empirically proven to influence intention to invest positively. Automatic investment technology, the second independent variable, also had a positive and significant impact on intention to invest. The R square value indicates that other predictors unaccounted in this research might explain about 55% of intention to invest as the dependent variable.

**Table 6** Regression Results

Variable	B	T-test	Sig.
Constant	8.627	9.857	0.000
Financial literacy	0.020	2.426	0.016
Automatic investment technology	0.590	16.436	0.000
F 158.380			0.000
R Square 0.454			

**Financial Literacy**

The statistical test results revealed the significant influence of financial literacy on the students' intention to positively invest in the capital market. It complies with [40]B originally proposed by Ajzen (1991), who inserted perceived behavioral control as a predictor of intention. Sivaramakrishnan et al. (2017) conceptualized financial literacy under the perceived behavioral control of TPB. Financial literacy measures the resource and opportunity as well as the behavioral constraint a person has. In the present study, the more knowledge resource a student had, the more intention he or she had to invest [6] in the capital market. This result confirms the theory and the empirical result of Sivaramakrishnan et al. (2017), proving the significant influence of financial literacy on investment intention.

[11] The result is also in line with Van Rooij et al. (2011), who claimed a strong relationship between stock participation and basic financial literacy. The correlation is even more robust for those who master advanced financial literacy. Later research by Mouna and Anis (2017) found that high literate people are more likely to participate in the stock market. The regression result complies with [14] those previous studies as it can be interpreted that students with higher literacy will lead to greater intention to participate in the capital market. Students' intention to invest rises as the financial literacy score elevates.

[44] In this research, financial literacy was measured using a set of questions related to personal finance. Even though the students had similar economic and finance backgrounds, it is worth noting that the financial literacy varied among them. The background of the study is not a guarantee of good financial literacy. Students who understand finance, not solely about investment but the overall financial literacy more thoroughly, have a higher intention to invest.

The financial literacy test also comprised various financial product-related questions. The students' familiarity with the financial products could also drive them to invest in the capital market. Conversely, lack of knowledge about financial products is a barrier to capital market participation. The empirical test also confirms the findings by Abdeldayem (2016) and A. Lusardi (2019), claiming that highly [43] literate people have a higher awareness of various financial products. In addition, Fitria et al. (2019) uncovered [5] positive correlation between financial literacy on the decision of investment types. In this study, the questionnaire consisted of several [5] questions about financial products, such as saving, loans, insurance, and investment. This study's results showed that

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students with higher financial literacy possessed greater intention to invest in the capital market, which is a quite risky type of investment generally.

Furthermore<sup>24</sup> the finding supports the statement by Lusardi and Wallace (2013), who concluded<sup>48</sup> that there was a positive correlation between financial literacy and financial practices among high school and college students. To some extent, financial literacy can also indicate people's awareness of personal financial management. This study's data disclosed that most of the students, by 82.55%, received income solely from their parents. Students with better literacy are expected to be aware of allocating a certain amount of their limited income for an investment better. Those students have greater intention to buy capital market products. In addition, investing in the capital market is more convenient for students given wider access to knowledge via the internet nowadays. Hence, capital market products become a desirable investment for the students.

#### Automatic Investment Technology

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Table 6 displays the significant positive impact of automatic investment technology on the students' intention to invest in the capital market. The current technology is indeed an important factor that affects students to invest. Technology can also accommodate the investors to invest in the capital market with wide access and easiness.

This finding complies with the result of previous research by Yusuf (2019), who found a positive relationship between technology and investment by students. However, the technology mentioned in the previous study concerned only online trading. In this study, the researchers focused on the automatic investment technology known as Robo advisor that is still rarely examined.<sup>5</sup> Students who had a better perception regarding Robo advisor had greater intention to invest in the capital market. As the students perceive technology as providing<sup>4</sup> more ease, safety, convenience, and wider access to the capital market, the intention to invest in the capital market is rising consequently.

As reported by KSEI (2020), 54.60% of the investors were investing through financial technology companies in 2020. Meanwhile, young people, including students aged 21-30, dominated the investor demography by 54.9%<sup>14</sup> (KSEI, 2020). The empirical data portrays how technology is an important factor in students' intention to participate in the capital market. The students who concede that the augmented<sup>2</sup> technology of capital market investment provides entrance for them have the intention to invest in the capital market.

Among the advanced features of the technology, the Robo advisor technology provides an investment portfolio for the user. It is a notable innovation that assists new investors in choosing the products. Potential investors often have to deal with unfamiliar financial products offered in the market, such as stocks, obligations, and mutual funds. The automatic investment technology will direct the potential investors to the optimum investment portfolio, which validates their risk profile. Without having to comprehend

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all financial products profoundly, the students can start the investment in the capital market within a very short time.

The result also supports Brenner and Meyll (2020), who stated that young people owning relatively low portfolio value benefit more from the technology. Many fintech companies employing automatic investment technology also attract students as potential investors by requiring only a small amount of initial investment. This technology was favorable for most students receiving financial support from their parents in this research. Consequently, students have a growing intention to participate in the capital market. Moreover, there is an option to deduct some predetermined amount of money automatically from the investors' account periodically. It helps allocate the money for investment consistently.

## Conclusion

<sup>36</sup> In the present study, the researchers examined the effect of financial literacy and automatic investment technology on intention to invest in the capital market. The researchers found that financial literacy had a positive and significant impact on the intention to invest in the capital market. In general, the results support the theory of Ajzen (1991) and many previous empirical studies (Abdeldayem, 2016; Das & Ali, 2020; Fitria et al., 2019; Mouna & Anis, 2017; Van Rooij et al., 2011; Yusuf, 2019). However, the financial literacy score was diversified among students, with the majority obtaining a moderate score. In this regard, the economic and finance background of the respondents did not seem adequate to represent good financial literacy necessarily. The second variable, automatic investment technology, was found to correlate significantly with the intention to positively invest in the capital market. The availability, the easiness, and the convenience of technology raise the intention to start investing.

Practically, the research contributes to the policymaker on the financial sector and capital market stakeholders. They are suggested to improve financial literacy among society at many levels by conducting various inclusive programs. The financial literacy result implies that students are least excelled in investment knowledge. Higher education institutions can also take part in providing financial knowledge for students. Such programs are expected to grow intention among people to participate in the capital market and encourage them to invest eventually. Moreover, private sectors providing automatic investment technology shall continue developing a more convenient application accessible by a broader range of society.

Moreover, some limitations of this study are worth noting. The researchers only used students as this study's focus in a regional area. The independent variables could only predict about 45% of the dependent variable, while the rest should better be linked to other factors. Furthermore, financial literacy was assessed using a set of questions without categorizing it into basic and advanced questions.

Therefore, further research should be conducted involving a larger sample area with various backgrounds and ages. The intention to invest in the capital market might be associated with other determinants, such as environment, risk, digital literacy, and more advanced financial literacy measurement. Financial literacy can be measured with other methods and can be set as moderating variable to explain intention. To better comprehend the entire financial behavior, the intention can also be linked later to the actual capital market participation.

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