Investment Decision: The Role of Financial Literacy and Financial Technology (Fintech)

Zulfa Zakiatul Hidayah✉[1], Abdul Latif[2], Nadia Meirani[3]

[1][2] Faculty of Economics and Business, Pelita Bangsa University, Bekasi, Indonesia
[3] Faculty of Economics and Business, Bandung Islamic University, Bandung, Indonesia

Abstract

The purpose of investing is to make a profit. The millennial generation is a generation that knows a lot about finance and tends to be good at managing their money and can anticipate financial problems in the future. This study aims to see how financial literacy and financial technology affect a person's investment decisions, especially an employee in determining the form of investment. The population used is all employees in the Bekasi area. The data source for this study uses primary data obtained from the results of distributing questionnaires using Google Form. The sampling technique using the Lemeshow formula on the millennial generation in the Bekasi area received 192 questionnaires with Linkert scale measurements. The research conducted by the researcher is to measure the positive influence of several indicators on each variable in it using a statistical test tool with Partial Least Square (PLS) using Smart-PLS software. The results of the research conducted show that the financial literacy variable is a factor that significantly influences individual investment decisions, in addition, the financial technology variable also influences individual decisions to invest.

How to Cite

Hidayah, Z.Z., Latif, A., & Meirani, N.(2024). Investment Decision: The Role of Financial Literacy and Financial Technology (Fintech). *Economic Education Analysis Journal*, 13 (3), 245-252.

✉ Correspondance Address:
Jl. Inspeksi Kalimalang No.9, Cibatu, Cikarang Sel., Kab. Bekasi, Jawa Barat 17530
Email: zulfazakiatul23@pelitabangsa.ac.id

INTRODUCTION

Indonesia from year to year has an increase in the investment level, seen from 11.54 million Indonesian investors, 57.04% are over 30 years old having assets of IDR 50.51 trillion. Investments are dominated by young investors in capital market products, including stocks and mutual funds, due to the efforts of the Indonesia Stock Exchange (IDX) and other institutions that support the capital market to introduce their products by opening online investment accounts (Erika Kurnia, 2023). Indonesians' income is usually saved for savings, investment, and consumption. In investment, individuals or entities that earn money have the opportunity to invest their capital in an organization in the hope of making a profit. Investment data shows a positive trend over the past four years(Trivani & Soleha, 2023). Investment decision making is highly considered in determining the outcome of the investment itself. therefore to be easy, bold, and precise, investment decision making analysis requires several elements. The indicators used are rate of return, return of risk, and return-risk relationship(Azhari & Damingun, 2021). Factors that influence investment decisions are return, risk, and the period of investment return. In investment, decision-making always involves risk because risk is defined as exposure to danger or loss, and risk includes all potential outcomes that can harm a business(Wolf & Karszes, 2023).

This allows them to easily and quickly access information about existing investments and opportunities(Toto & Kartika, 2023). In investment research can increase the chances of investment success (Sudirman & Pratiwi, 2022). An investor in making investment decisions is based on two behaviors, namely rational and irrational behavior, where rational behavior is a person's behavior based on common sense based on the analysis of the data obtained, on the other hand irrational behavior is a person's thinking behavior that is not based on common sense and is based on future predictions (Amalia Yunia Rahmawati,

2020). To be able to make investment decisions, a person must have sufficient financial literacy and knowledge of financial technology. To avoid risk, investment decisions must be influenced by elements such as increasing investors' financial knowledge. General financial knowledge includes knowledge and understanding of various financial instruments that enable investors to make the best financial decisions and avoid financial risk (Amalia Yunia Rahmawati, 2020). The indicators that will be used by financial literacy variables in this study are basic knowledge, savings and loans, investment and insurance (Fadila et al., 2022).

Apart from financial knowledge, in making investment decisions we must look at the times that exist with the development of increasingly advanced technology. Over the years, Indonesians have used financial sector technology to make investments. The use of this technology is very important for managing income (Yundari & Artati, 2021). Financial services use financial technology significantly to improve service efficiency (R. E. Putri et al., 2022). Financial technology is the use of technology to make financial services easier, more convenient and efficient (Bakker et al., 2023). Financial Technology variables have indicators such as electronic payments, crowdfunding, p2p, and digital banking will be used (Mardiati & Zen, 2022). Investment decisions based on many internal and external factors are very broad. So both financial literacy and financial technology both have a role in making someone's investment decision.

METHODS

This study is to determine the relationship between the dependent variable (Y) investment decisions, independent variables (X) Financial Literacy (X1) and financial technology (X2), this research uses a quantitative approach with statistical methods (Cahyani et al., 2020). In this case, statistical test tools are used, which will later be used to test the researcher's hypotheses and studies. The pur-

pose of using statistical test tools is to measure the relationship between the influence of several indicators on each variable X and variable Y in it. In this study, the population and sample are millennials from Bekasi employees. In this study, a non-probability sampling technique. with an accidental sampling approach was used. with non-probability sampling, researchers want to target a specific population with specific characteristics (e.g., millennials with certain fintech access) so that not all members of the population have the same opportunity to be selected, while research on financial literacy and financial technology on millennials allows for limited generalizations to the millennial group which is indeed the working age and generation that has become a market leader. This approach was chosen given the accessibility constraints to a large population. To determine the representative sample size, the researcher adopted Lemeshow's formula. The sample consists of people living in Bekasi who are interested and have made an investment. The indicators used are rate of return, return of risk, and return-risk relationship(Azhari & Damingun, 2021). The indicators that will be used by financial literacy variables in this study are basic knowledge, savings and loans, investment and insurance (Fadila et al., 2022). Financial Technology variables have indicators such as electronic payments, crowdfunding, p2p, and digital banking will be used (Mardiati & Zen, 2022). With a sample size of 192 respondents. The type of data used is primary data obtained from the results of distributing questionnaires using google forms. Likerd scale measurement is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena, with the provisions (5) Strongly Agree; (4) Agree; (3) sufficient; (2) Disagree; and (1) Strongly Disagree. Data analysis techniques used are analysis methods PLS (Partial Least Square) with Smart software PLS 4.0.

RESULTS AND DISCUSSION

The results of the data analysis method carried out in this study using SmartPLS software are presented in the Table 1.

Tabel 1. Outer Loading

	Financial Technology	Investment Decision	Financial Literacy
X1.1			0.878
X1.2			0.825
X1.3			0.811
X1.4			0.831
X1.5			0.828
X1.6			0.806
X1.7			0.853
X1.8			0.845
X2.1	0.767		
X2.2	0.769		
X2.3	0.863		
X2.4	0.872		
X2.5	0.783		
X2.6	0.844		
X2.7	0.873		
X2.8	0.814		
X2.9	0.826		
Y1.1		0.899	
Y1.2		0.932	
Y1.3		0.873	
Y1.4		0.897	
Y1.5		0.919	
Y1.6		0.891	

Source: Processed Primary Data, 2024

Validity Test Results

This study employed the Average Variance Extracted (AVE) measure to assess the convergent validity of the latent constructs. The analysis revealed that the AVE values for all constructs exceeded the threshold of 0.5, indicating that each indicator successfully captured a substantial portion of the variance of its corresponding construct. Consequently, it can be concluded that the constructs in this study exhibit both reliability and validity.

Table 2. Average Variance Extracted (AVE) Test

	AVE
Financial Literacy	0.680
Financial Technology	0.813
Investment Decision	0.697

Source: Processed Primary Data. 2024

Based on the Table 2., the average value obtained by Average Variance Extracted (AVE) for each of the first three variables Financial Literacy (X1) is 0.680. for the second variable Financial Technology (X2) has a value of 0.813 and 0.697 for Investment Decision (Y). As a result, all variables in this study have an AVE greater than 0.50 and are considered valid.

Reliability Test Results

Reliability analysis using composite values and Cronbach alpha shows that all latent variables in this study have adequate reliability. The value of the two reliability indicators exceeds the 0.7 threshold, which indicates high internal consistency in each latent variable and is reliable.

Table 3. Cronbach Alpha Test

	Cronbach's Alpha
Financial Literacy	0.941
Financial Technology	0.954
Invesment Decision	0.938

Source: Processed Primary Data, 2024

From the Table 3, it can be concluded that the value of the Financial Literacy variable (X1) has a Cronbach alpha value of 0.941 or > 0.70, which means that the variable has a high level of reliability. For the Financial Technology variable (X2) has a Cronbach alpha value of 0.954 or > 0.70, which means that the variable also has a high level of reliability and the dependent variable, namely the Investment Decision (Y) has a Cronbach alpha value of 0.938 or > 0.70, which means it has a high level of reliability.

Inner Model Test Results

R Square Test Results

The amount of contribution of the independent variable in explaining the variability of the dependent variable can be seen from the coefficient of determination (R-squared). An R-squared value of 0.75 indicates that 75% of the variance in the dependent variable can be explained by the independent variable, which indicates a strong relationship. Similarly, a value of 0.50 indicates a moderate relationship, and a value of 0.25 indicates a weak relationship.

Table 4. R Square Test Results

	R Square	Adjusted R Square
Investment Decision	0.772	0.768

Source: Processed Primary Data, 2024

Based on the Table 4, it can be concluded that the R-Square value on the Investment Decision variable is 0.772 which indicates that the model has a moderate relationship, where 77.2% of the Investment Decision variable is influenced by Financial Literacy and Financial Technology and the remaining 22.8% is influenced by other factors that have not been studied.

Bootsrapping Results

T-test analysis is used to test hypotheses in research conducted if the research uses the PLS method, namely by using the bootstrapping method.

The Figure 1 shows the purpose of this hypothesis test is to determine how one component affects another construction. If the P-value of a variable is high, say 0.05 or 5%, then it is considered to have a significant effect on other variables; however, if the P-value is greater than 0.05 or 5%, it cannot be stated that it has a significant effect on other variables. With hypothesis testing, we know whether

the variable under study has an influence or not on other variables. From the bootsrapping results, it shows that both financial literacy and financial technology have a P-value that is smaller than 0.05, so the results of the two variables have a significant influence on investment decisions.

Path Coefficient Test

Same as the previous provision which states, if the P value of a variable is high from 0.05, then it is considered to have a significant influence on other variables but if the P value is greater than 0.05, then it cannot be said to have a significant influence on other variables. Likewise with the Path Coefficient Test, we can find out whether the variables studied have an influence or not on other variables.

Financial Literacy Has A Significant Influence On Investment Decisions

It is known that the P Values value on the Financial Literacy variable (X1) of 0.000 is smaller than 0.05, therefore there is an in-

Table 5. Path Coefficient Test Results

	Original Sample (O)	Mean (M)	ST DEV	(|O/ STDEV|)	P Values
FL →ID	0.677	0.673	0.065	10.471	0.000
FT → ID	0.268	0.271	0.069	3.870	0.000

Source: Processed Primary Data, 2024

fluence between the Financial Literacy variable on Investment Decisions. These results are supported by previous research in which a person's financial literacy has an influence on the investment decisions taken (Widyaningsih et al., n.d.).

An investor in making investment decisions is based on two behaviors, namely rational and irrational behavior, where rational behavior is a person's behavior based on common sense based on the analysis of the data obtained, on the other hand irrational
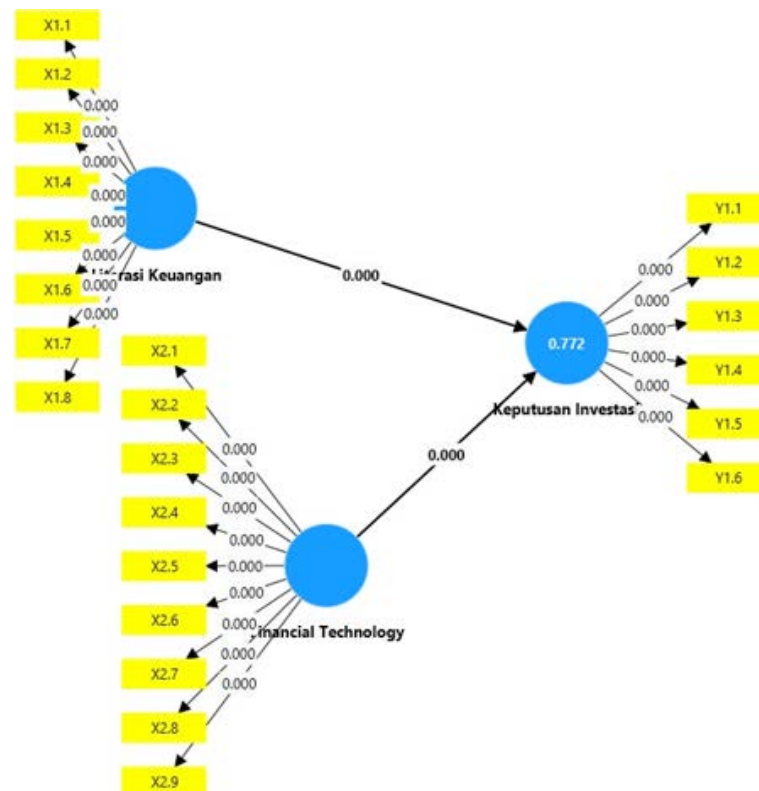

Figure 1. Bootsrapping

behavior is a person's thinking behavior that is not based on common sense and is based on future predictions (Amalia Yunia Rahmawati, 2020). To be able to make investment decisions, a person must have sufficient financial literacy. To avoid risk, investment decisions must be influenced by elements such as increasing investors' financial knowledge. General financial knowledge includes knowledge and understanding of various financial instruments that allow investors to make the best financial decisions and avoid financial risk (Amalia Yunia Rahmawati, 2020). In information processing, perception, understanding, making one's decision on financial behavior among older adults is better able to process information and analyze problems, achieving better financial results (Tang, 2021). When a person's financial knowledge is better, a person's financial decision making is better, because that person can be wiser in managing his finances because he knows how to manage and minimize the financial risks that will occur to him. Financial knowledge and financial literacy are essential for making informed financial decisions. Cognitive ability may play an important role in raising both (Lin & Bates, 2022). Financial services use financial technology significantly to improve service efficiency (M. A. Putri & Juwita, 2022). Previous research does exist that says that financial literacy affects investment decisions and financial management (Dwinta, 2010). In the stock market, the financial literacy that a person has can greatly influence a person's behavior towards the financial decisions they will take (Hidayah et al., 2024). In addition, not only in Bekasi City, previous research located in Bandung City also stated that financial literacy influences the investment decisions of Bandung residents (Krisnawati, 2019).

Financial Technology Has A Significant Influence On Investment Decisions

Financial Technology on Investment Decisions It is known that the P Values value on the Financial Technology variable (X2) of 0.000 is smaller than 0.05, therefore there is an influence between the Financial Technology variable on Investment Decisions. The test results are in line with previous research which states that Financial Technology has an influence on investment decision making (Fadila et al., 2022). Research on Surabaya students conducted by (Mahardhika & Asandimitra, 2023) supports that financial technology influences investment decisions.

In the era of technology, the development of the times is very rapid to be able to make investment decisions, in addition to having sufficient literacy, one also needs knowledge of financial technology. financial knowledge allows investors to make the best financial decisions and avoid financial risk (Amalia Yunia Rahmawati, 2020). Seeing the times that exist with the development of increasingly advanced technology. Over the years, Indonesians have used financial sector technology to make investments. The use of this technology is very important for managing income (Yundari & Artati, 2021). in addition, financial technology strengthens the influence on investment decisions. in addition, financial technology strengthens the influence on investment decisions(Restianti et al., 2022). Financial technology significantly to improve service efficiency (R. E. Putri et al., 2022). financial technology can facilitate access to information and investment transactions so as to influence investment decisions. (Hambali, 2024) Financial technology can be seen from the use of technology to make financial services easier, more convenient and efficient (Bakker et al., 2023). Financial Technology variables have indicators such as electronic payments, crowdfunding, p2p, and digital banking will be used (Mardiati & Zen, 2022). If we do not understand the existing financial technology, the investment decisions made will be limited and not enough in accordance with the times that occur, because there are more and more decision options that can be taken. Financial technology (fintech), has changed the way we invest by making access easier, information faster, and costs cheaper. Investors can access a wide

range of investment instruments, from stocks to mutual funds, through an easier and faster process through online investment platforms. In addition, fintech provides real-time market data, in-depth analysis, and investment recommendations tailored to each individual's risk profile. As such, fintech not only expands the investment reach for the general public, but also equips investors with the tools and information needed to make smarter and more informed investment decisions.

CONCLUSION

Data analysis shows that the financial literacy variable is a factor that significantly influences an individual's investment decision, besides that the financial technology variable also affects the individual's decision to invest. Based on these findings, it is recommended that the government increase financial literacy programs to increase public knowledge about investment. The government and financial institutions need to intensify innovative and attractive financial education programs for millennials, as well as integrate financial literacy into formal education curricula, to increase financial awareness and skills of the younger generation. In addition, efforts to create more attractive investment programs also need to be made. For the public, utilizing various learning resources such as seminars, training, and education on online media can be the first step to understanding the world of investment. Future researchers can enrich this research by limiting the sample to certain age groups or increasing the sample size. It is also worth considering adding other relevant variables to get a more comprehensive understanding such as internal factors that exist in individuals.

REFERENCES

Amalia Yunia Rahmawati. (2020). Literasi Keuangan, Risk Tolerance Dan Overconfidence Terhadap Keputusan Investasi Pada Pekerja Di Kawasan Industri Cikarang. 5(July), 1–23.

Azhari, R., & Damingun, D. (2021). Pengaruh Bias Representative terhadap Keputusan Investasi di Pasar Modal. *Borneo Studies and Research*, 2(2), 1424–1430.

Bakker, M. B. B., Garcia-Nunes, B., Lian, W., Liu, Y., Marulanda, C. P., Sumlinski, M. A., Siddiq, A., Yang, Y., & Vasilyev, D. (2023). The rise and impact of Fintech in Latin America. International Monetary Fund.

Cahyani, R., Tristiarto, Y., & Marlina, M. (2020). Analisis Literasi Keuangan dan Inklusi Keuangan Financial Technology Terhadap Personal Finance Nasabah PT Bank Negara Indonesia (Persero), Tbk di Kota Bekasi. *Konferensi Riset Nasional Ekonomi, Manajemen, Dan Akuntansi I.*

Dwinta, I. dan C. Y. (2010). Pengaruh Locus Of Control, Financial Knowledge, Income Terhadap Financial Management Behavior. *Jurnal Bisnis Dan Akuntansi*, 12(3), 131–144.

Erika Kurnia. (2023). Gen Z Dominasi Pasar Modal Indonesia. In Kompas (p. gen).

Fadila, N., Goso, G., Hamid, R. S., & Ukkas, I. (2022). Pengaruh Literasi Keuangan, Financial Technology, Persepsi Risiko, dan Locus of Control Terhadap Keputusan Investasi Pengusaha Muda. *Owner: Riset Dan Jurnal Akuntansi,* 6(2), 1633–1643.

Hambali, D. (2024). The Impact of Financial Technology, Financial Literacy, and Financial Performance on Investment Decisions. *Indonesian Business Review*, 7(2), 115–124.

Hidayah, Z. Z., Widiastuti, W., & Mulyana, A. (2024). Analisis Pengaruh Financial Literasi, dan Financial Experience terhadap keputusan Investasi Saham. *SEIKO: Journal of Management & Business,* 7(1), 23–29.

Krisnawati, A. (2019). Analisis Pengaruh Literasi Keuangan Terhadap Keputusan Investasi pada Masyarakat Kota Bandung. *Almana: Jurnal Manajemen Dan Bisnis*, 3(2), 301–312.

Lin, C. A., & Bates, T. C. (2022). Smart people know how the economy works: Cognitive ability, economic knowledge and financial literacy. *Intelligence*, 93(February), 101667. https://doi.org/10.1016/j.intell.2022.101667

Mahardhika, M. D., & Asandimitra, N. (2023). Pengaruh overconfidence, risk tolerance, return, financial literacy, financial technology terhadap keputusan investasi yang dilakukan mahasiswa Surabaya. *Jurnal Ilmu Manajemen,* 602–613.

Mardiati, L., & Zen, F. (2022). Financial knowledge dan financial technology pada financial management behavior mahasiswa. *Arthavidya Jurnal Ilmiah Ekonomi.*

Putri, M. A., & Juwita, H. A. J. (2022). Pengaruh Overconfidence, Loss Aversion, dan Herding terhadap Keputusan Investasi Emas Era Tahun Pertama Pandemi Covid-19 (Studi Pada Masyarakat di Daerah Khusus Ibukota Jakarta). *Ekonomi Dan Bisnis,* 19, 1–15.

Putri, R. E., Goso, G., Hamid, R. S., & Ukkas, I. (2022). Pengaruh Literasi Keuangan, Financial Technology dan Inklusi Keuangan terhadap Kinerja Keuangan Pengusaha Muda. *Owner: Riset Dan Jurnal Akuntansi,* 6(2), 1664–1676.

Restianti, R., Sakti, D. P. B., & Suryani, E. (2022). Pengaruh Financial Behavior, Financial Literacy, Financial Technology Terhadap Keputusan Berinvestasi Gen Z. *Jurnal Sosial Ekonomi Dan Humaniora,* 8(3), 384–390.

Sudirman, W. F. R., & Pratiwi, A. (2022). Overconfidence Bias dalam Pengembilan Keputusan Investasi: Peran Perbedaan Gender. *Muhammadiyah Riau Accounting and Business Journal,* 3(2), 081–092. https://doi. org/10.37859/mrabj.v3i2.3493

Tang, N. (2021). Cognitive abilities, self-efficacy, and financial behavior. *Journal of Economic Psychology,* 87(September), 102447. https://doi.org/10.1016/j.joep.2021.102447

Toto, T., & Kartika, R. (2023). Faktor yang mempengaruhi minat gen z dalam berinvestasi di pasar modaL. *Creative Research Management Journal,* 6(1), 1–11.

Trivani, G., & Soleha, E. (2023). The Effect of Financial Literacy, Income and Self Control on Financial Behavior Generation Z (Study on Generation Z Financial Behavior in Bekasi Regency). *Economic Education Analysis Journal,* 12(1), 69–79.

Widyaningsih, D., Siswanto,) Edy, & Zusrony,) Edwin. (n.d.). The role of financial literature through digital financial innovation on financial inclusion (case study of MSMEs in Salatiga city). *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal,* 5. https://jurnal.stie-aas.ac.id/index.php/IJEBAR

Wolf, C. A., & Karszes, J. (2023). Financial risk and resiliency on US dairy farms: Measures, thresholds, and management implications. *Journal of Dairy Science,* 106(5), 3301–3311. https://doi.org/10.3168/jds.2022-22711

Yundari, T., & Artati, D. (2021). Analisis Pengaruh Literasi Keuangan. Perilaku Keuangan Dan Pendapatan Terhadap Keputusan Investasi.