



The Role of Fintech in Gold Investment Decisions to Increase Financial Inclusion in the Mataraman Region of Java

Dian Kusumaningtyas¹, Ismayantika Dyah Puspasari^{2*}, Syahrehan³, Revika Yulia Citra⁴

ABSTRACT

Financial literacy is one of the important steps in increasing investment to help people choose the right and safe investment. The low level of financial literacy in Indonesia is one of the urgencies to conduct research related to financial decision making. With the development of technology, the financial literacy needed also extends to digital literacy because all systems in investment have been intersected with digital systems. The purpose of this study is to analyze the role of Financial Technology (Fintech) on Gold Investment Decisions. The variables in fintech are Perceived ease to use (X1) and Perceived usefulness (X2), other variables are Financial Literacy (Z) and Gold investment decision as the dependent variable. The urgency of the research is expected to help detect whether financial inclusion in the Mataraman Java area has been used properly in investment.

This research is a causality quantitative research with financial literacy variables as intervening variables. The research population is users of investment application technology in generation Z, the number of samples in this study amounted to 83 respondents who already have gold investments. The results of this study indicate that perceived ease of use has no significant effect on financial literacy and gold investment decisions. The perceived usefulness variable has a significant effect on financial literacy and Gold investment decisions. Perceived ease of use and perceived usefulness have a significant effect on gold investment decisions with financial literacy as an intervening variable.

Keywords:TAM, Financial Literacy, Gold Investment, Mataraman

INTRODUCTION

Investment is a crucial factor in economic development for any country, including Indonesia. It is hoped that investment will revive an economy impacted by the global recession. By investing, people's well-being will be less impacted in the event of a recession. A global economic downturn will pose a challenge to the national economy's ability to maintain growth and development. East Java, the second-most populous province after West Java, has the slogan "East Java Rises," aiming to recover from the slump caused by the COVID-19 pandemic, which impacted economic growth due to inflation and rising prices. However, in addition to Covid, in 2024 Indonesia is predicted to be affected by global geopolitical instability which poses a threat to global economic growth in the medium term. Indonesia is the country most affected by the pandemic, war and also the higher for longer phenomenon of the United States Central Bank.(Lemhanas, 2024).

However, Bank Indonesia believes that East Java's economy will still grow in 2023 as policy and innovation synergies are created between the regional government, Bank Indonesia, and institutions/authorities in East Java.(Nashrullah, 2024)Bank Indonesia's confidence in economic growth aligns with investment realization data in East Java published by the Ministry of Investment (BKPM). One of the steps taken by East Java Province to encourage investment is by



improving financial literacy among the public. Data on East Java's financial literacy rate in 2024 was above the national average at 55.33 percent, while the national average was 49.68 percent. Governor Khofifah continues to emphasize consistency, hard work, and synergy between the provincial government, regencies/cities, and agencies such as the Financial Services Authority (OJK) and Bank Indonesia to work together to promote financial literacy in East Java so that it continues to increase closer to the financial inclusion rate. Java Mataraman is located in East Java province, which was formerly part of the Mataram Kingdom.

One crucial aspect in supporting the success of encouraging public investment is the transition to digital gold investment. Research shows that Indonesians, previously more accustomed to physical gold transactions, are now shifting to digital gold investment apps. This is driven by the convenience offered by apps like Pluang, which allow users to buy and sell gold more easily and quickly (Kurniawan et al., 2022).

Mataraman Javanese people invest heavily in land, property, and gold and jewels. Financial literacy is a crucial step in increasing investment, helping people choose the right and safe investments. With technological advancements, the literacy required has also expanded to digital literacy, as all investment systems are now interconnected with digital systems (Nashrullah, 2024). Financial literacy is a primary responsibility of the East Java government, providing an overview of available investments and options, as well as the appropriate steps for making investment decisions. When making decisions, each person typically behaves differently. Some people base their decisions on specific considerations, while others consider many other factors to make the right decision.

The decision-making process becomes easier when investors are fully aware of all confounding or risky variables. These variables guide them in making informed decisions, thereby avoiding or minimizing future losses. (Dinas Kominfo Provinsi Jawa Timur, 2024). Technology Acceptance Model (TAM) as a basis for studying factors that might motivate organizations to invest (or not invest) in information security (Awais et al., 2016). Regarding gold investment with the Technology Acceptance Model (TAM), investors are currently given convenience in making investments.

Previously, gold investments were primarily in the form of jewelry, but this carried the risk of physical damage from wear and tear or being dropped, which could reduce its value. With technological advancements, gold investments can be made by becoming a customer of a digital gold savings account, available at pawnshops, banks, or marketplaces. Generally, the price is lower because there are no printing fees (Johnson, 2005). TAM proposes perceived ease of use and perceived usefulness of technology, user attitudes towards technology use (attitude towards), behavioral intentions, and actual usage (Masrom, 2007). In addition, there are seven other variables that influence perceived usefulness and perceived ease of use, namely the external environment, previous information security experience, perceived risks of not securing information, information security budget, security planning, trust in information security, and security awareness and training (Johnson, 2005).

Gold prices fluctuate significantly, but generally show an upward trend. Research by (Dewi et al., 2022) shows that people tend to turn to gold as a safer investment instrument amid economic



uncertainty. This is in line with findings from (Putra, 2024), which indicates that digital gold investment is gaining popularity as it is seen as a more practical way to protect assets from inflation and market uncertainty. Based on this background and references from several journals, researchers wanted to re-examine gold investment.

The research problem is whether perceived ease of use and perceived usefulness influence gold investment decisions, with literacy as an intervening variable. The problem-solving approach involves distributing questionnaires in the form of Google Forms and questionnaires to respondents who have invested in the Mataraman area of Java, which are then analyzed using the PLS analysis tool. The research sample uses purposive sampling with random data collection techniques. The novelty of this research is the limited number of studies examining gold investment and examining the characteristics of respondents in the Mataraman area of Java. By studying this, it is hoped that a specific approach to financial literacy in other investments will be found, thereby improving the welfare of the people of East Java, especially the Mataraman area.

LITERATURE REVIEW

1. Investment Decisions

Investment is an activity related to the acquisition of resources used to procure capital goods in the present, which will then generate a flow of new products in the future. Fitz Gerald also explained that investment is an activity related to the acquisition of resources to be used to procure goods. This capital will generate a flow of new products in the future (Gerald.F, 1978). In determining investment decisions, there are several things that form the basis for someone in making decisions, namely the rate of return on investment, investment risk, and investment period (Pujiyanto & Mahastanti, 2013).

2. Technology Acceptance Model

TAM or Technology Acceptance Methodology is a methodology introduced by (Davis, 1989) which is also a development of the Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1975). TAM assumes that a person's acceptance of information technology is influenced by two main variables, namely Perceived Usefulness and Perceived Ease of Use. Perceived ease of use is defined as the degree to which a person believes that using a particular system reduces effort. Ease means without difficulty or effort. Perceived ease of use refers to the user's belief that the technology system they are using does not require significant effort. Davis defines perceived usefulness as the level at which a person believes that a particular system will be able to improve the work performance or performance of the user of the system.

3. Financial Literacy

Financial literacy is a reflection of a person's ability to use and manage finances (Lusardi, 2008). This opinion is supported by Vitt et al. (2000), Cole & Fernando (2008) who also stated that financial literacy is the ability to process information and make personal financial decisions. More broadly, financial literacy measures a person's ability related to understanding currency exchange rates, financial service features, financial record keeping,



attitudes towards spending money, awareness of risks and rewards, and the ability to make financial decisions (ASIC, 2003; Gregor, 2006).

METHOD

This research is quantitative with a descriptive approach. It aims to analyze the influence of perceived ease of use and perceived usefulness on gold investment decisions, with literacy as an intervening variable. Questionnaires will be distributed to investors or customers who have gold savings across all platforms, whether in financial institutions, e-commerce platforms, or elsewhere. The target population is those residing in the Mataraman region of Java, namely Madiun, Kediri, Tulungagung, Blitar, Trenggalek, Pacitan, Ngawi, Lamongan, Bojonegoro, and Banyuwangi.

The population in this study is unknown or infinite. Therefore, the sample calculation is based on $10 \times$ variables (Sugiyono, 2016). Therefore, the minimum sample size was 40 respondents. The data collection technique employed by the researcher involved the assistance of colleagues or students to distribute questionnaires, and respondents were required to have access to investment application services. The PLS approach to data analysis was adopted due to its ability to solve systems of simultaneous equations representing networks of relationships between variables and to estimate coefficients that measure these relationships.

RESULTS

Partial Least Square Analysis

The purpose of this study is to analyse Perceived ease of use and Perceived usefulness on Investment Decisions with financial literacy as an intervening variable. Causality test is used to test the research hypothesis of Perceived ease of use and Perceived usefulness on Investment Decisions with Financial literacy as an intervening variable. The research hypothesis can be accepted if the p-value is <0.05 .

The following are the path coefficient values (*original sample estimate*) and the p-value in the inner model:

Table 1. Results of Path Coefficient Values and p-value

	Original sample (O)	Standard deviation (STDEV)	T statistics ($ O/STDEV $)	P values
Financial Literacy -> Investment Decisions	0.391	0.105	3,735	0.000
Perceived Ease to Use -> Financial Literacy	0.093	0.134	0.692	0.489
Perceived Ease of Use -> Investment Decision	0.070	0.109	0.646	0.518
Perceived Usefulness -> Financial Literacy	0.771	0.134	5,739	0.000
Perceived Usefulness -> Investment Decision	0.501	0.133	3,778	0.000

Source: PLS Output

Based on Table 1, it is also explained in detail the structural equations and testing of the research hypothesis of Perceived ease of use, Perceived usefulness on Investment Decisions with financial literacy as an intervening variable:

$$Z = 0.093X_1 + 0.771X_2$$

$$Y = 0.070X_1 + 0.501X_2 + 0.391Z$$

**Hypothesis 1: There is a significant influence of Perceived ease of use on financial literacy.**

The resulting path coefficient was 0.093 with a p-value of 0.489, greater than 0.05. This indicates an insignificant positive effect between Perceived Ease of Use and Financial Literacy. This means that greater Perceived Ease of Use will improve Financial Literacy, but the increase is not statistically significant. Based on these results, the first hypothesis of the study, which assumed that Perceived Ease of Use had a significant effect on Financial Literacy, cannot be accepted.

Hypothesis 2: There is a significant influence of Perceived usefulness on Financial literacy

The resulting path coefficient was 0.771 with a p-value of 0.000, less than 0.05. This indicates a significant positive effect between perceived usefulness and financial literacy. This means that higher perceived usefulness will improve financial literacy. Based on these results, the second hypothesis of the study, which assumes that perceived usefulness has a significant effect on financial literacy, is accepted.

Hypothesis 3: There is a significant influence of Perceived Ease of Use on Investment Decisions

The resulting path coefficient is 0.070 with a p-value of 0.518, greater than 0.05. This indicates an insignificant positive effect between Perceived Ease of Use and Investment Decisions. This means that higher Perceived Ease of Use will increase Investment Decisions, but statistically the increase is not significant. Based on these results, the third hypothesis of the study, which assumes that Perceived Ease of Use has a significant effect on Investment Decisions, cannot be accepted.

Hypothesis 4: There is a significant influence of Perceived Usefulness on Investment Decisions

The resulting path coefficient is 0.501 with a p-value of 0.000, which is less than 0.05. This indicates a significant positive effect between Perceived Usefulness and Investment Decisions. This means that greater Perceived Usefulness can increase Investment Decisions, and this is statistically significant. Based on these results, the fourth hypothesis of the study, which suspects Perceived Usefulness has a significant effect on Investment Decisions, is accepted.

Hypothesis 5: There is a significant influence of financial literacy on investment decisions.

The resulting path coefficient was 0.391 with a p-value of 0.000, less than 0.05. This indicates a significant positive effect between financial literacy and investment decisions. This means that higher financial literacy can improve investment decisions. Based on these results, the fifth hypothesis of the study, which assumes financial literacy has a significant effect on investment decisions, is accepted.

The following are the path coefficient values (original sample estimate) of the indirect effect and the p-value of the inner model.



DISCUSSION

The influence of perceived ease of use on financial literacy

The resulting path coefficient was 0.093 with a p-value of 0.489, greater than 0.05. This indicates an insignificant positive effect between Perceived Ease of Use and Financial Literacy. This means that greater Perceived Ease of Use will improve Financial Literacy, but statistically the increase is not significant. Perceived ease of use (PEOU) is an important factor influencing financial literacy, particularly in the context of technology adoption. As individuals perceive financial technology as easier to use, engagement with application services has the potential to increase financial literacy. This relationship is supported by numerous studies showing that higher perceived ease of use correlates with increased use of financial technology, which in turn can lead to improved financial knowledge and skills (Putri & Rahyuda, 2017).

However, despite the theoretical basis suggesting a positive relationship between PEOU and financial literacy, empirical evidence suggests that the statistical significance of this relationship may not always hold. Furthermore, financial literacy is complex as a construct influenced by various external factors, including perceived ease of use (Goyal & Kumar, 2020). Although the literature generally supports the idea that PEOU can increase engagement with financial technology, the statistical significance of this relationship varies across contexts and populations. This variability suggests that while perceived ease of use is an important factor, it is not the sole determinant of financial literacy outcomes. In some studies, the direct effect of ease of use on improving financial literacy was not statistically strong enough. This may be due to the presence of other, more powerful variables, such as perceived usefulness, trust, or intention to use. Usually after knowing and being able to use the system easily, a person does not become more financially literate without further education.

The Influence of Perceived Usefulness on Financial Literacy

The resulting path coefficient was 0.771 with a p-value of 0.000, less than 0.05. This indicates a significant positive effect between Perceived Usefulness and Financial Literacy. This means that higher Perceived Usefulness will improve Financial Literacy. *Perceived usefulness* Financial literacy is a person's belief that a technology can provide benefits in their life or work. In the context of financial literacy, if someone experiences the true benefits of technology or financial products (such as digital banking applications, e-wallets, or investment platforms), their motivation to learn, understand, and apply financial knowledge to those products will increase.

Perceived usefulness (PU) has been identified as a significant factor influencing financial literacy, particularly in the context of technology adoption and financial decision-making. A significant relationship exists between PU and financial literacy, indicating that individuals who perceive financial tools and technologies as useful are more likely to improve their financial literacy and make informed financial decisions. The study found that perceived usefulness of financial technology indirectly improves financial literacy through changes in financial behavior (Radianto & Suryanto, 2023). When someone feels that technology can help them manage their finances, they will be motivated to learn it, develop financial behaviors that align with their lifestyle needs, and thus improve their financial literacy.



The Influence of Perceived Ease of Use on Investment Decisions

The resulting path coefficient is 0.070 with a p-value of 0.518, greater than 0.05. This indicates a non-significant positive effect between Perceived Ease of Use and Investment Decisions. This means that higher Perceived Ease of Use will increase Investment Decisions. PEOU is one of the determining factors for investors in making investment decisions, with features that are easy to understand and learn, will encourage investors to adopt application services.

Perceived Ease of Use refers to a person's perception that an application is easy to use. This perception can encourage investors to feel comfortable and interested in using the application, thus fostering confidence in making investment decisions. However, previous research conducted on users of capital market and digital investment applications showed that, although perceived ease of use has a positive (undirectional) but not always significant influence on investment decisions. This means that the ease of use of the application is considered quite helpful but not strong enough to be a primary or determining factor in investment decisions (Ummah, 2024).

The Influence of Perceived Usefulness on Investment Decisions

The resulting path coefficient is 0.501 with a p-value of 0.000, which is less than 0.05. This indicates a significant positive effect between Perceived Usefulness and Investment Decisions. This means that greater Perceived Usefulness can increase Investment Decisions. The benefits of investment services can influence investors in decision-making, while the benefits of technology can help in completing work. It can shorten time without having to go to the bank. This can influence investors in transactions on application services.

- Perceived Usefulness is an investor's belief that using an investment application or system will increase the effectiveness and productivity of their investment transactions. For example, when an investor believes that an investment application like Bibit or IPOT can simplify and improve their investment management performance, they are more likely to make positive investment decisions based on that application.
- A study shows that the higher an investor's perception of the usefulness of an investment application, the greater the likelihood of positive considerations and decisions regarding investment. This effect was statistically significant, indicating that the usefulness of an investment product or system is a significant factor driving investment decisions.
- In addition, other studies also confirm that perceived usefulness not only has a direct influence on investment decisions, but also contributes to increasing investor trust in investment applications, which ultimately strengthens investment intentions and decisions.

The Influence of Financial Literacy on Investment Decisions

The resulting path coefficient is 0.391 with a p-value of 0.000, which is smaller than 0.05. This indicates a significant positive effect between financial literacy and investment decisions. This means that higher financial literacy can improve investment decisions. Investors' knowledge can be the basis for decision-making. How investors understand the gold situation on that day and



how they should proceed in making decisions requires good financial literacy. By having good financial literacy, a person has sufficient information and knowledge to make the right investment decisions.

Financial literacy will improve investors' understanding of risks and potential returns, thereby enhancing their knowledge of risk. A higher risk tolerance, supported by adequate financial knowledge, encourages investors to make better investment decisions and be more optimistic in selecting investment instruments according to their risk profile. Research shows that financial literacy has a positive and significant influence on investment decisions for several reasons, including:

- Investors with high financial literacy have the ability to manage finances well and anticipate risks that may occur in investments.
- Financial literacy increases analytical skills and making careful considerations in selecting investment instruments to suit your goals and risk profile.
- A person with good financial literacy is also more selective and able to distinguish valid and safe investments from high-risk or bogus investment.

CONCLUSION

The conclusion obtained in this study is that perceived ease of use and perceived usefulness own influence on gold investment decisions with financial literacy as an intervening variable

LIMITATION

The limitation of this research is that there are still many other factors that can be determinants in influencing financial literacy and gold investment decisions.

REFERENCES

Awais, M., Fahad Laber, M., Rasheed, N., & Khursheed, A. (2016). International Journal of Economics and Financial Issues Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions: Empirical Evidence from Pakistan. *International Journal of Economics and Financial Issues*, 6(1), 73–79.

Davis, F. D. (1989). Perceived Usefulness Perceived Ease of Use, and User. *MIA Quarterly*, 13(3), 319–340. <https://doi.org/https://psycnet.apa.org/doi/10.2307/249008>

Dewi, D. M., Nafi', M. Z., & Nasrudin, N. (2022). Analisis Peramalan Harga Emas Di Indonesia Pada Masa Pandemi Covid-19 Untuk Investasi. *Jurnal Litbang Sukowati : Media Penelitian Dan Pengembangan*, 5(2), 38–50. <https://doi.org/10.32630/sukowati.v5i2.235>

Dinas Kominfo Provinsi Jawa Timur. (2024). Jawa Timur. <Https://Jatimprov.Go.Id/Beranda>.



Gerald.F. (1978). *Public Sector Investment Planning for Developing Country (First Edit)*. The MacMillan India Press Ltd.

Johnson, A. M. (2005). The Technology Acceptance Model and the Decision to Invest in Information Security. *Association for Information Systems AIS Electronic Library (AISel)*, 3–4.

Kurniawan, T. A., Milanda, D. P., & Primastiwi, A. (2022). Norma Subyektif Dalam Penerimaan Aplikasi Emas Digital Dengan Menggunakan Model TAM. *Jurnal Akuntansi Keuangan Dan Bisnis*, 15(2), 637–646. <https://doi.org/10.35143/jakb.v15i2.5771>

Lemhanas. (2024). Deputi Bidang Pengkajian Ekonomi dan SKA Lemhannas RI Laksanakan FGD Risiko Krisis Ekonomi Global 2024. *Lemhanas. Go.Id*.

Masrom, M. (2007). Technology acceptance model and E-learning. *12th International Conference on Education, May*, 21–24.

Nashrullah, H. (2024a). Inklusi dan Literacy jatim diatas rata-rata nasional. *Antara Jatim*.

Nashrullah, H. (2024b). Inklusi dan literasi keuangan Jatim di atas rata-rata nasional. *Antara Jatim*.

Pujiyanto, N., & Mahastanti, L. A. (2013). Regret Aversion dan Risk Tolerance dalam Keputusan Investasi. *Proceeding of International Conference Sustainable Competitive Advantage (SCA)*, 3(1).

Putra, D. R. S. (2024). Prediksi Harga Emas Menggunakan Algoritma Genetik Pada Platform Pegadaian. *Jurnal Riset Informatika Dan Teknologi Informasi*, 1(2), 53–56. <https://doi.org/10.58776/jriti.v1i2.65>

Putri., & Rahyuda, H. (2017). PENGARUH TINGKAT FINANCIAL LITERACY DAN FAKTOR SOSIODEMOGRAFI TERHADAP PERILAKU KEPUTUSAN INVESTASI INDIVIDU. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 9(6), 3407–3434.

Radianto, W. D., & Suryanto, A. (2023). Analysis of The Benefits of Financial Technology and Financial Socialization Towards Financial Behavior in Students in Surabaya Post Pandemic with Financial Literacy as The Intervening Variable. *Business and Finance Journal*, 8(1), 30–47. <https://doi.org/10.33086/bfj.v8i1.4138>

Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. PT Alfabet.

Ummah, K. (2024). Pengaruh Perceived Usefulness, Perceived Ease of Use, dan Literasi Keuangan Terhadap Keputusan Penggunaan Aplikasi Investasi Pada Mahasiswa Universitas Sebelas Maret Surakarta. <https://digilib.uns.ac.id/dokumen/abstrak/116296/Pengaruh-Perceived-Usefulness-Perceived-Ease-of-Use-dan-Literasi-Keuangan-Terhadap-Keputusan-Penggunaan-Aplikasi-Investasi-Pada-Mahasiswa-Universitas-Sebelas-Maret-Surakarta>