



THE ANALYSIS OF FINANCIAL LITERACY ON INVESTMENT DECISIONS AMONG WOMEN WORKING IN THE FORMAL SECTOR IN SURABAYA: THE ROLE OF FINANCIAL BEHAVIOR AND RISK TOLERANCE AS MEDIATOR

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Abstract

Investment is one of the many financial decisions individuals make and becomes a means of fulfilling unlimited human needs with limited resources. This research aims to determine the influence of financial literacy on investment decisions with financial behavior and risk tolerance as mediating variables on women who work in the formal sector in Surabaya City. The sample in this research is 160 respondents using a purposive sampling technique, the data collection method uses a questionnaire, and the analysis uses PLS. The research results show that financial literacy positively affects the investment decisions of women who work in the formal sector in Surabaya City. Financial behavior positively mediates the relationship between financial literacy and investment decisions of women who work in the formal sector in Surabaya City. Risk tolerance cannot mediate the relationship between financial literacy and investment decisions of women who work in the formal sector in Surabaya City.

Keywords: Financial Literacy, Investment Decision, Financial Behavior, Risk Tolerance

INTRODUCTION

Nowadays, technological development in various sectors is growing relatively fast and can be used to support human productivity. It can also be utilized in many industries, such as quick information delivery. With the growth of information technology, people should be technologically literate because financial information is more abundant than before (Ayuningtyas & Irawan, 2021). Financial information helps provide financial literacy to nominee investors. Investment is known as an activity of investment to gain profit. The growth of information technology that makes people get information and learn it easier can cause the investment not to be desired anymore. Still, it is a need (Matruty dkk., 2021).

Many men and women invest with the expectation that they can make a profit. KSEI (Kustodian Sentral Efek Indonesia) shows the data about Indonesian capital market statistics as of December 2021, 2022, and 2023 that stated the presentation of gender that is investing, men 62.61% and women 37.39% in 2021, men 62.59% and women 37.40% in 2022, and men 62.33% and women 37.67% in 2023. It shows that women's investor presentation is lower than men's; it can happen because women still need to invest as a priority. Investor presentation data from KSEI is supported by the data from Otoritas Jasa Keuangan (OJK) in Surabaya city that showed a decline of the number of investors by as much as 23.43% in 2022 and 12.58% in 2023. It is caused by the habit of prioritizing consumption over investment, especially for women, so it makes the investment presentation.

Women tend to be more consumerist and prioritize buying the things that bolster their appearance, especially women with jobs, income that is earned for individual happiness, or what they

expect because they think that appearance is essential for showing social status (Ardani, 2023). Career women should have high financial literacy and financial strategies to set aside their wages for investing. Career women with high financial literacy can choose the investment product to top them for the expected profit. Career women can utilize investment as a side income and fulfill their needs (Putri & Mulyani, 2023).

Financial literacy can be the first step toward investment. Otoritas Jasa Keuangan (OJK) shows the financial literacy data is improving significantly by 49,68% in 2022, which means that Indonesian people know the importance of financial literacy. Otoritas Jasa Keuangan also publishes the financial literacy index, which shows that the presentation of women's financial literacy is higher than men's, a much 50,33% (women) and 49,05% (men). Financial literacy is essential in making a sound investment decision in the investment context because suitable finances can help one manage finances effectively.

THEORETICAL REVIEW

Heuristic Theory

The heuristic theory is a model that explains how individuals can receive and process persuasive information. This theory helps explain how someone's investment decision can be affected. Heuristic theory supports the relation between individual financial habits and investment decisions (Iram dkk., 2023).

Investment Decision

An investment decision is when someone invests for profit. Investors who deposit their funds with a company expect to receive more than their deposit (A'iniyah & Taufiqurahman, 2021). Investments can be profitable or lossful, so investors should understand things that affect their investment decisions (Suciawati & Sinarwati, 2021).

Investment decisions can only be made with basic investment literacy and sound financial analysis (Ramashar dkk., 2022). Choosing an investment decision needs to be thought out well because a wrong investment decision can cause a loss (Lestari, 2023). Investment decisions can't be the same for every individual because it has many factors that affect them, but investment decisions that always have an expensive profit

Financial Literacy

Financial literacy is knowledge that can be used to make financial decisions and achieve financial goals (Putri & Simanjuntak, 2020). Someone with financial literacy can evaluate the right financial product and appropriately invest in insignia financial products' investment risk well (Musa dkk., 2024).

Financial Literacy can be interpreted as the primary thing that someone should master well before making a financial decision. Financial literacy can improve self-confidence when making financial decisions (Uttari & Yudiantara, 2023). Understanding financial literacy causes someone to enjoy their financial resources well (Gultom et al., 2022). Someone can reach a financial goal by having a high financial literacy so they can manage their finances.

Financial Behavior

Financial behavior is a manner in which someone replicates finances (Suciyawati & Sinarwati, 2021). Financial behavior involves the financial and physical ability to manage an individual's funds as an essential financial decision (Rahman & Yulian, 2022). Good financial behavior should be habituated so people can make perfect financial planning decisions.

Financial behavior has a relation to someone's financial management. Someone with good financial behavior is always careful with the fund and has a responsibility for it (Komarudin dkk., 2020). The different financial behaviors of each other will raise different reactions when there is available information to make a decision, especially a financial decision. Investors with good financial behavior can also manage their funds (Uttari & Yudiantara, 2023).

Risk Tolerance

Risk tolerance is an investor's response to existing risk (Kurniawati S, 2020). It can be known as an investor's readiness to face the loss caused by their investment without excessive worry and restlessness. Risk tolerance levels can vary from one investor to another; an investor carefully invests, and an investor approves of the high risk for the high reward or profit (Nabila & Safri, 2022).

Sufficient knowledge and literacy about risk tolerance will help investors make an investment decision that aligns with their risk tolerance. Investors with a low-risk tolerance tend to choose stable investment products, and high-risk investors tend to choose high-risk, high-return investment products. The level of risk that they decide on will affect the profit that they earn (Al Mubayin, 2022).

METHOD

The data used in the research is primary data. The research population is women who work in the formal sector in Surabaya. The research sample consisted of 160 respondents using a purposive sampling method. Data was collected using a questionnaire containing statements describing the indicators used in the research. These statements were filled in by respondents using a Likert scale of 1 to 5. The data was then analyzed using PLS. The research model is as follows:

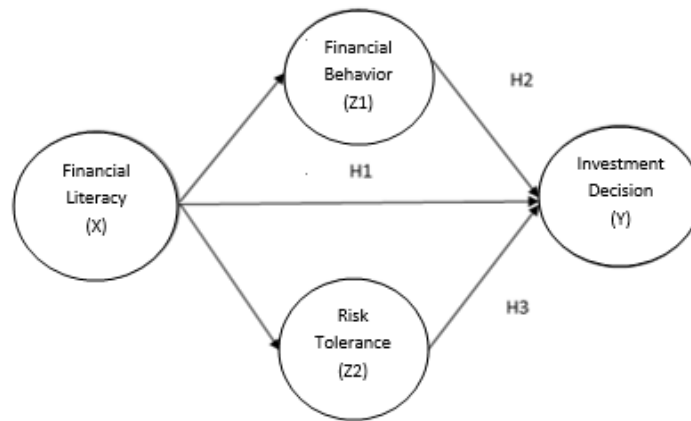


Figure 1: Conceptual Framework

RESULTS AND DISCUSSION

A. Outer Model

1. Convergent Validity

Table 1 Outer Loading

Indicator	Investment Decision (Y)	Financial Literacy (X)	Financial Behavior (Z1)	Risk Tolerance (Z2)
X1.1		0.899		
X1.2		0.818		
X1.3		0.804		
X1.4		0.750		
Y1.1	0.865			
Y1.2	0.896			
Y1.3	0.924			
Y1.4	0.888			
Y1.5	0.838			
Z1.1			0.831	
Z1.2			0.887	
Z1.3			0.815	
Z2.1				-0.086
Z2.2				0.939
Z2.3				0.085

Source: PLS

Based on the outer loading table above, it can be seen that the loading factor values of indicators Z2.1 and Z2.3 are <0.5, so these indicators are not used to measure the variables and are

subsequently eliminated. Meanwhile, other indicators have been said to be valid and can be used to carry out measurements. The results of data processing after elimination are as follows:

Table 2 Outer Loading After Elimination

Indicator	Investment Decision (Y)	Financial Literacy (X)	Financial Behavior (Z1)	Risk Tolerance (Z2)
X1.1		0.900		
X1.2		0.822		
X1.3		0.805		
X1.4		0.746		
Y1.1	0.865			
Y1.2	0.896			
Y1.3	0.923			
Y1.4	0.888			
Y1.5	0.839			
Z1.1			0.831	
Z1.2			0.887	
Z1.3			0.815	
Z2.2				1.000

Source: PLS

The table above is the result of adjustments by eliminating indicators Z2.1 and Z2.3, resulting in all factor loading values for each indicator being >0.5 , so it can be said that all indicators are valid.

2. Composite Reliability

Table 3 Composite Reliability

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	R-Square
Investment Decision (Y)	0.929	0.946	0.779	0.653
Financial Literacy (X)	0.835	0.891	0.672	
Financial Behavior (Z1)	0.799	0.882	0.714	0.654
Risk Tolerance (Z2)	1.000	1.000	1.000	0.056

Source: PLS

The test result shows that the composite reliability of Financial Literacy, Investment Decisions, Financial Behavior, and Risk Tolerance was >0.7 , which means that all variables are reliable. The AVE value is >0.5 , which indicates that the validity is good. The table shows that the AVE value for all variables is >0.5 , so it is valid. Investment Decisions have an R-Square value of 0.653, meaning that the model can explain 65.3% of Investment Decision problems, and the remaining 34.7% is explained by variables other than Financial Literacy, Financial Behavior, and Risk Tolerance.

B. Inner Model

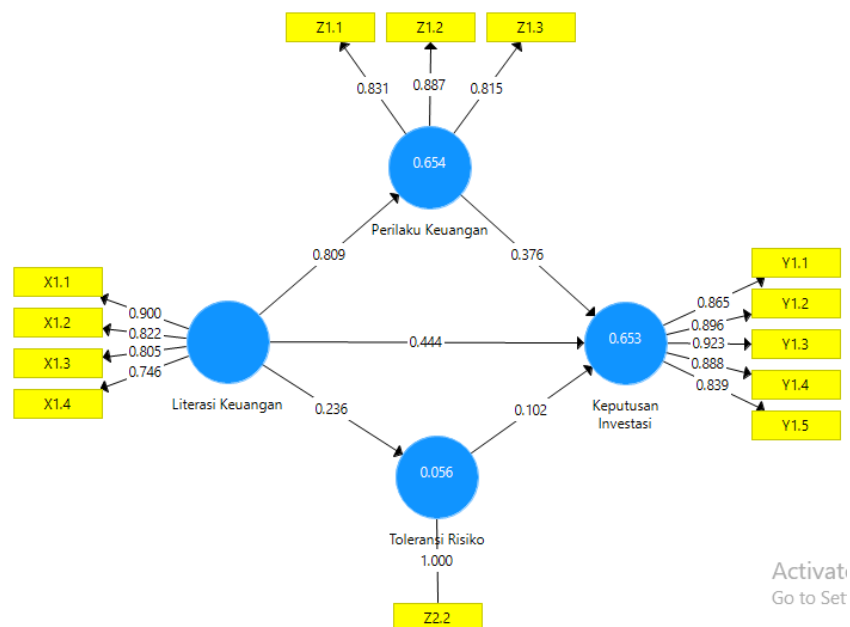


Figure 2 Outer Model

1. Hypothesis Testing

Table 4 Path Coefficients

	Path Coefficients	P Values	Information
Financial Literacy (X) -> Investment Decision (Y)	0.444	0.000	Significant
Financial Literacy (X) -> Financial Behavior (Z1) -> Investment Decision (Y)	0.304	0.000	Significant
Financial Literacy (X) -> Risk Tolerance (Z2) -> Investment Decision (Y)	0.024	0.244	Non Significant

Source: PLS

Results and Discussion

The Influence of Financial Literacy on Investment Decision

Testing and processing questionnaire data using PLS shows a significant positive relationship between Financial Literacy and Investment Decisions. The results obtained show that Financial Literacy has a positive effect on Investment Decisions. If the financial literacy of women who work in the formal sector of Surabaya City increases, it will impact investment decisions.

The results of this research are supported by the results of research by Iram et al. (2023), which states that financial literacy has a significant positive effect on investment decisions. With their financial literacy, individuals can have the potential to have a successful investment career. The research results of Musa et al. (2024) also reveal that financial literacy has a significant positive effect on investment decisions.

The Influence of Financial Literacy on Investment Decisions through Financial Behavior

Testing and processing questionnaire data using PLS with an indirect influence show that financial behavior can mediate the impact of financial literacy on investment decisions among working women in the formal sector of the city of Surabaya. These results explain that good financial literacy improves investment decisions and improves financial behavior to be wiser and more focused.

The results of this research are supported by the results of research by Hasanudin et al. (2022), which revealed that financial behavior plays a role in mediating the relationship between financial literacy and investment decisions. The research results also state that financial behavior can fully mediate the relationship between financial literacy and investment decisions.

The Influence of Financial Literacy on Investment Decision through Risk Tolerance

Testing and processing questionnaire data using PLS with an indirect influence show that risk tolerance had a positive and insignificant effect on mediating the influence of financial literacy on investment decisions of working women in the formal sector of Surabaya City. This means that high financial literacy did not cause these individuals to be careful about the risks involved in investing.

The results of this research are supported by the results of research by Naiwen et al. (2021), which revealed that risk tolerance, as a mediating variable, has a positive and insignificant role in the relationship between financial literacy and investment decisions. Research by Nadhifah & Anwar (2021) also reveals that risk tolerance cannot mediate the relationship between financial literacy and investment decisions. A person with high financial literacy needs to pay more attention to risk when making an investment decision.

CONCLUSION

1. Financial literacy contributes to increasing investment decisions among women who work in the formal sector in Surabaya City.
2. Financial literacy can contribute to investment decisions through financial behavior among women in Surabaya City's formal sector.
3. Financial literacy cannot contribute to investment decisions through risk tolerance among women working in Surabaya City's formal sector.

ACKNOWLEDGMENTS

I want to thank Allah SWT for His mercy and grace; I was able to complete this research. Shalawat and greetings are always poured out on the Prophet Muhammad SAW, his family, his friends, and his followers. I thank myself for always fighting and trying to complete everything. I also want to thank my parents, who always supported me and prayed for me. I thank my lecturer, Mr. Muhadjir Anwar, who guided me during my research, and the people around me, who always accompanied me.

REFERENCES

- A'iniyah, R. Q., & Taufiqurahman, E. (2021). Pengaruh Indikator Makroekonomi, Kinerja Keuangan dan Harga Saham terhadap Return Saham: Studi pada Perusahaan Manufaktur IDX30 di BEI 2015-2019. *Derivatif: Jurnal Manajemen*, 15(2), 192–202.
- Al Mubayin, M. M. (2022). Pengaruh Literasi Keuangan dan Risiko Investasi Terhadap Minat Investasi Mahasiswa. *Jembatan: Jurnal Ilmiah Manajemen*, 19(2), 223–238. <https://doi.org/10.29259/jmbt.v19i2.18116>
- Ardani, D. A. (2023). Hubungan antara Konformitas dengan Perilaku Konsumtif Pembelian Fashion. *Arus Jurnal Pendidikan*, 3(2), 70–74.
- Ayuningtyas, M. F., & Irawan, A. (2021). The Influence of Financial Literacy on Bandung Generation Z Consumers Impulsive Buying Behavior With Self-Control As Mediating Variable. *Advanced International Journal of Business, Entrepreneurship and SMEs*, 3(9), 155–171. <https://doi.org/10.35631/aijbes.39012>
- Gultom B.T, HS Renol S, & Siagian L. (2022). Dampak Literasi Keuangan terhadap Perilaku Keuangan Mahasiswa (Studi Kasus di Universitas Hkbp Nommensen Pematang Siantar). *Jurnal Pendidikan Ekonomi Undiksha*, 14(1), 134–144. <https://ejournal.undiksha.ac.id/index.php/JJPE/article/view/46896>
- Hasanudin, Nurwulandari, A., & Caesariawan, I. (2022). Pengaruh Literasi Keuangan, Efikasi keuangan, dan Sikap Keuangan terhadap Keputusan Investasi melalui Perilaku Keuangan. *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, 5(2), 581–597. <https://doi.org/10.32670/fairvalue.v5i2.2318>
- Iram, T., Bilal, A. R., & Ahmad, Z. (2023). Investigating The Mediating Role of Financial Literacy on The Relationship Between Women Entrepreneurs ' Behavioral Biases and Investment Decision Making. *Gajah Mada International Journal of Business*, 25(1), 93–118.
- Komarudin, M. N., Nugraha, Hardjadi, D., & Pasha, R. A. (2020). Pengaruh Literasi Keuangan Dan Pengendalian Diri Terhadap Perilaku Pengelolaan Keuangan (Survei Pada Tenaga Pendidik SD SeKecamatan Kuningan). *Jurnal Keuangan dan Bisnis*, 18(1), 159–178.
- Kurniawati S, I. Y. (2020). Pengaruh Pengetahuan Keuangan, Risk Tolerance Terhadap Investasi Saham, Dimoderasi Gender. *BALANCE: Economic, Business, Management and Accounting*

- Journal*, 17(1), 91. <https://doi.org/10.30651/blc.v17i1.4188>
- Lestari, M. N. (2023). Faktor Yang Berpengaruh Terhadap Keputusan Investasi Mahasiswa. *Jurnal Ekonomi Bisnis dan Akuntansi*, 3(3), 226–235. <https://doi.org/10.55606/jebaku.v3i3.2889>
- Matruty, D. J., Borolla, J. D., & Regar, E. (2021). Determinan Keputusan Mahasiswa Dalam Berinvestasi. *PUBLIC POLICY (Jurnal Aplikasi Kebijakan Publik & Bisnis)*, 2(2), 331–349. <https://doi.org/10.51135/publicpolicy.v2.i2.p331-349>
- Musa, M. I., Aslam, A. P., Aswar, N. F., Syahrul, K., & Parawansa, J. M. (2024). A Financial Playbook for Making Investment Decisions. *Media Ekonomi dan Manajemen*, 39(1), 115. <https://doi.org/10.56444/mem.v39i1.4446>
- Nabila, V., & Safri. (2022). Pengaruh Literasi Keuangan dan Toleransi Risiko Terhadap Keputusan Investasi Tabungan Emas (Studi Kasus Nasabah Di PT Pegadaian (Persero) Cabang Kramat Jati). *Jurnal Ilmiah Mahasiswa Akuntansi*, 2(1), 32–42.
- Nadhifah, R., & Anwar, M. (2021). Pengaruh Literasi Keuangan Dan Toleransi Risiko Terhadap Keputusan Investasi (Studi Pada Warga Desa Sekapuk Kabupaten Gresik). *E-Bisnis : Jurnal Ilmiah Ekonomi dan Bisnis*, 14(2), 1–11. <https://doi.org/10.51903/e-bisnis.v14i2.388>
- Naiwen, L., Wenju, Z., Mohsin, M., Ur Rehman, M. Z., Naseem, S., & Afzal, A. (2021). The role of financial literacy and risk tolerance: An analysis of gender differences in the textile sector of Pakistan. *Industria Textila*, 72(3), 300–308. <https://doi.org/10.35530/IT.072.03.202023>
- Putri, F. A., & Mulyani, E. (2023). Analisis Perbedaan Perilaku Investasi Saham Antara Wanita dan Pria di Pasar Modal Indonesia. *Jurnal Eksplorasi Akuntansi*, 5(3), 978–998. <https://doi.org/10.24036/jea.v5i3.752>
- Putri, P. T., & Simanjuntak, M. (2020). The Role of Motivation, Locus of Control and Financial Literacy on Women Investment Decisions Across Generation. *Journal of Consumer Sciences*, 5(2), 102–123.
- Rahman, K., & Yulian, T. N. (2022). Pengaruh Perilaku Keuangan dan Pendapatan terhadap Keputusan Investasi Saat Pandemi Covid-19 dengan Literasi Keuangan sebagai Variabel Intervening. *Inovasi: Jurnal Ekonomi, Keuangan dan Manajemen*, 18(1), 139–144. <https://doi.org/10.30872/jinv.v18i1.10418>
- Ramashar, W., Hanifa Sandri, S., Hidayat, R., Studi Akuntansi, P., Ekonomi dan Bisnis, F., Muhammadiyah Riau, U., & Studi Keuangan Perbankan, P. (2022). Faktor Psikologi dan Keputusan Investasi Mahasiswa di Pasar Modal. *Jurnal Riset Akuntansi dan Keuangan*, 10(1), 93–102. <https://doi.org/10.17509/jrak.v10i1.136709>
- Suciyawati, N. P., & Sinarwati, N. K. (2021). Pengaruh Perilaku Keuangan terhadap Keputusan Investasi. *Jurnal Manajemen*, 13(4), 795–803. <https://doi.org/10.29264/jmmn.v13i4.10439>
- Uttari, L. P. J. A., & Yudiantara, I. G. A. P. (2023). Pengaruh Literasi Keuangan, Pendapatan, dan Perilaku Keuangan terhadap Keputusan Investasi Generasi Milenial Melalui Aplikasi BIBIT. *Vokasi : Jurnal Riset Akuntansi*, 12(01), 1–10. <https://doi.org/10.23887/vjra.v12i01.58169>