International Conference on Sustainable Economics, Management, and Accounting (ICSEMA 2025)
Proceedings
Vol. 01 No. 01 Year 2025, Page 4320-4328

FINANCIAL LITERACY, RISK TOLERANCE, AND INVESTMENT DECISIONS: EVIDENCE FROM YOUNG UNIVERSITY INVESTORS IN INDONESIA

Agung Setiawan[1]*, Kinanti Geminastiti Hilmiatussadiah[2], Lazuardi Imani Hakam[3], Navik Istikomah[4]

[1-4] Fakultas Pendidikan Ekonomi dan Bisnis, Universitas Pendidikan Indonesia, Indonesia
*Email corresponding author: agung.setiawan@upi.edu

Abstract

This study examines the influence of financial literacy and risk tolerance on the investment decisions of Generation Z investors in Indonesia's emerging capital market. Although young investors represent a promising segment for future market expansion, their participation remains constrained by limited financial knowledge and heightened sensitivity to perceived investment risk. Drawing on survey data collected from university students affiliated with investment galleries in Bandung, this study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to evaluate the relationships between financial literacy, risk tolerance, and investment decision-making behavior. The findings reveal that financial literacy significantly and positively affects investment decisions, while risk tolerance also exerts a meaningful positive influence. These results underscore the importance of financial knowledge and psychological readiness in shaping young investors' engagement in capital markets. The study contributes to the growing literature on behavioral finance in emerging economies and offers practical implications for financial education programs and risk-awareness initiatives targeted at youth investors.

Keywords: financial literacy, risk perception, investment behavior, young investors, PLS-SEM.

INTRODUCTION

Investment plays a pivotal role in promoting economic development through capital formation, job creation, and the strengthening of long-term financial systems (Levine & Zervos, 1998). In Indonesia's developing capital market, participation from retail investors—particularly from the younger generation—remains limited, despite the growing accessibility of financial services through digital platforms. According to Otoritas Jasa Keuangan (OJK, 2022), only a small portion of the Indonesian population actively participates in capital market instruments, leaving the country behind its regional peers in investor inclusion.

Among the potential investor segments, young people—especially university students—represent a critical demographic for expanding market depth and long-term investor sustainability (Lusardi, Mitchell, & Curto, 2010). While this group has broad access to financial technology and information, many young novice investors struggle to make informed investment decisions. Low levels of financial literacy and high sensitivity to perceived investment risks remain key barriers to their engagement in financial markets (van Rooij, Lusardi, & Alessie, 2011).

Financial literacy, broadly defined as knowledge and understanding of financial concepts and risks, is a key enabler of responsible financial behavior (Huston, 2010). A higher level of financial literacy allows individuals to evaluate investment opportunities, mitigate risks, and construct diversified portfolios (Lusardi & Mitchell, 2014). Conversely, limited knowledge often leads to low market participation or poor investment outcomes, particularly among new entrants to the market.

In addition to cognitive capacity, psychological factors such as risk perception and tolerance play a significant role in shaping financial behavior. Based on Prospect Theory (Kahneman & Tversky, 1979), individuals tend to give greater weight to potential losses than to gains, which can

lead to overly cautious investment decisions. Young investors, especially those with limited experience, often exhibit high risk aversion and uncertainty avoidance (Grable & Lytton, 1999). Complementing this, Signaling Theory (Spence, 1973) explains how financial knowledge serves as a signal that reduces uncertainty and builds confidence in navigating investment decisions.

Despite a growing interest in behavioral finance, studies focusing specifically on young investors in emerging markets like Indonesia remain limited. Existing literature has largely concentrated on older or institutional investors (Barber & Odean, 2001; Baker & Nofsinger, 2010), or has been conducted in developed countries with more mature financial literacy frameworks (OECD, 2016). This leaves a gap in understanding how both financial literacy and risk tolerance interact to influence investment behavior among Indonesian youth, particularly university students who are digitally active but still in the early stages of building financial competence.

To address this gap, the present study examines how financial literacy and risk tolerance affect investment decisions among Generation Z university students in Bandung, Indonesia. The study focuses on students affiliated with campus-based investment galleries, a unique environment where young individuals are exposed to capital market instruments and information. Using a structured survey and data analysis through Partial Least Squares Structural Equation Modeling (PLS-SEM), the study explores the extent to which knowledge and psychological readiness influence investment choices. The findings are expected to contribute to the growing body of literature on financial behavior in developing economies, while offering practical insights for financial educators, policymakers, and institutions seeking to foster responsible investment behavior among Indonesia's youth.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

In recent years, the rapid growth of individual investors in Indonesia, especially from the younger demographic, has attracted attention from academics and policymakers alike. Generation Z (Gen Z), born between 1995 and 2010, has become the most dominant group in new investor registrations, facilitated by technological advancements and the democratization of financial information. Despite this positive trend, Indonesia still faces challenges related to financial inclusion and literacy. According to the Otoritas Jasa Keuangan (OJK, 2022), the national financial literacy index remains below the optimal level, particularly among younger groups. This condition poses risks to sustainable participation in the capital market and raises concerns about the quality of investment decision-making among novice investors. Therefore, understanding the key factors that influence investment decisions—specifically, financial literacy and risk tolerance—is vital for strengthening Gen Z's role in long-term economic growth.

Financial literacy is often cited as one of the most critical determinants of financial behavior, including budgeting, saving, debt management, and investing. Lusardi and Mitchell (2014) define financial literacy as the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being. In the context of investment decisions, financial literacy helps individuals to understand financial products, assess potential risks and returns, and evaluate investment opportunities critically. Research has consistently shown a positive link between financial literacy and sound investment behavior. For instance, Susanto et al. (2024) found that Gen Z investors with higher financial literacy in Jakarta exhibited stronger tendencies to engage in long-term, diversified investment instruments and demonstrated better decision-making under uncertainty. Similarly, Gautama and Soma (2025) observed that digital financial literacy enhanced investor confidence in using mobile trading platforms, which mediated their investment engagement. These findings support the proposition that financially literate individuals are more likely to make well-informed investment decisions.

This relationship is well explained by Signaling Theory (Spence, 1973), which posits that individuals or organizations signal their quality or credibility through observable attributes. In financial contexts, financial literacy acts as a credible signal of competence. Investors who

understand financial concepts are better equipped to interpret market signals, assess risk-reward profiles, and resist emotional biases in financial decisions. Thus, the possession of financial knowledge not only empowers investors but also increases the likelihood of rational and deliberate investment behavior.

However, financial literacy alone may not fully explain investor behavior. Psychological traits, particularly risk tolerance, play a crucial role in shaping how individuals act upon their knowledge. Risk tolerance refers to an individual's willingness to accept variability in investment outcomes, including the possibility of financial loss. Prospect Theory (Kahneman & Tversky, 1979) provides a useful lens to understand this phenomenon. The theory suggests that individuals value gains and losses differently, leading them to make inconsistent choices under risk. In practice, two individuals with identical financial knowledge may respond differently to the same investment opportunity depending on their perception and acceptance of risk.

Empirical studies corroborate this theoretical insight. Asry et al. (2024) demonstrated that risk tolerance significantly mediates the relationship between financial literacy and investment decision-making among Indonesian youth. Yusup and Gunawan (2024) further revealed that while financial interest and literacy alone were not strong predictors of high-risk investment behavior, risk tolerance amplified the effects of financial knowledge, especially in short-term speculative investing. These findings underscore the need to consider both cognitive and psychological variables when analyzing investment decisions.

The unique characteristics of Gen Z further reinforce the relevance of examining financial literacy and risk tolerance jointly. This generation, often referred to as "digital natives," is known for its high dependence on technology and social media. According to Barron's (2023), Gen Z investors tend to prefer high-risk, high-reward investment products such as cryptocurrencies, NFTs, and forex trading. Their decisions are frequently influenced by social media trends, peer recommendations, and short-term performance metrics rather than fundamental analysis or long-term planning. The Financial Times (2023) adds that despite their early entry into the market, Gen Z investors often show low levels of portfolio stability and exhibit herd behavior, indicating gaps in risk awareness and long-term investment strategy. These patterns suggest that Gen Z's enthusiasm for investment must be accompanied by improved financial literacy and enhanced capacity to assess and accept risk rationally.

Taken together, the review of literature and theoretical underpinnings indicate that investment decisions among Generation Z are significantly shaped by two interrelated constructs: financial literacy and risk tolerance. Financial literacy provides the necessary foundation for understanding investment options, while risk tolerance determines how this knowledge is applied in practice. The interplay between these variables is central to the behavior of Gen Z investors, especially in emerging markets like Indonesia where financial education and exposure to investment are relatively new.

Based on the foregoing theoretical perspectives and empirical findings, this study proposes the following hypotheses:

H1: Financial literacy has a significant positive effect on investment decisions among Generation Z investors.

H2: Risk tolerance has a significant positive effect on investment decisions among Generation Z investors.

RESEARCH METHODS

This research employed a quantitative explanatory approach using a survey design to examine the influence of financial literacy and risk tolerance on investment decisions among Generation Z investors. The objective of this study was to test hypotheses derived from theoretical frameworks and prior empirical research by employing Structural Equation Modeling (SEM) as the primary data analysis technique.

The target population consisted of members of investment galleries (Galeri Investasi) in higher education institutions in Bandung, Indonesia, who belong to Generation Z (individuals born between 1995 and 2010). These investment galleries are collaborative initiatives between the Indonesia Stock Exchange (IDX) and universities, aiming to increase student participation in capital markets. The sample was selected using purposive sampling, with inclusion criteria specifying that respondents must: (1) be aged 18–27, (2) be registered as active members of a campus investment gallery, and (3) have experience in investment activities. The final sample consisted of 150 respondents, which meets the minimum requirement for SEM analysis, as suggested by Hair et al. (2019), where a sample size of more than 100 is considered sufficient for models with fewer than 5 latent variables and approximately 15–20 indicators.

Data collection was conducted through a structured online questionnaire distributed via Google Forms. The instrument was adapted from well-established previous studies. The financial literacy construct was measured using indicators from Chen and Volpe (1998), including basic knowledge of financial concepts such as inflation, interest, risk diversification, and time value of money. Risk tolerance was measured using the typology developed by Widoatmodjo (2009), which assesses willingness to take financial risks under uncertainty. Investment decision-making was measured using indicators adapted from Tandelilin (2010), focusing on return expectation, risk awareness, and investment horizon. All items were measured using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

A pilot test was conducted with 30 respondents to ensure the clarity, reliability, and validity of the instrument before full-scale distribution. Validity tests were performed using confirmatory factor analysis (CFA), and all standardized loading factors met the minimum threshold of 0.50. Internal consistency was evaluated using Cronbach's Alpha and Composite Reliability (CR), with all constructs exceeding the recommended cut-off value of 0.70. Furthermore, Average Variance Extracted (AVE) values for each construct were above 0.50, indicating adequate convergent validity, while discriminant validity was confirmed using the Fornell–Larcker criterion.

The data analysis process followed a two-step SEM procedure using SmartPLS 3.0 software. The first step involved assessing the measurement model to evaluate reliability and validity, including indicator loadings, CR, AVE, and multicollinearity through Variance Inflation Factor (VIF). The second step tested the structural model, assessing the strength and significance of the relationships between latent variables.

The data collection process was conducted over a period of four weeks in April 2023. Ethical considerations were taken into account by informing participants of the purpose of the research and ensuring that their participation was anonymous, voluntary, and confidential. No specialized tools or materials were used in the research, apart from the use of online forms and SEM software, which served as the primary tools for data acquisition and analysis.

Population and Sample

The target population for this study consists of young investors affiliated with university-based investment galleries in Bandung, Indonesia. These galleries, established in collaboration with the Indonesia Stock Exchange, serve as hubs for student engagement in capital market activities. The study focuses on students who have active investment accounts in the capital market. A simple random sampling technique was used to select respondents from multiple universities hosting investment galleries.

Table 1 presents the summary statistics of the main research variables, namely financial literacy, risk tolerance, and investment decision. The mean values for all three variables range between 4.58 and 4.91, indicating generally high levels of agreement among respondents on the measured indicators. The standard deviations, ranging from 0.89 to 0.98, suggest moderate variability in responses. The skewness and kurtosis values for all variables fall within the acceptable

range (between -1 and +1), indicating that the data distributions approximate normality and are suitable for further parametric analysis such as SEM.

Table 1 Summary Statistics of Research Variables

Variable	*Stat*						
	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Financial Literacy	150	2.43	6.85	4.86	0.91	-0.31	-0.44
Risk Tolerance	150	2.00	6.75	4.58	0.98	-0.27	-0.51
Investment Decision	150	2.14	6.95	4.91	0.89	-0.35	-0.18

Source: authors calculation

Data Collection and Instrument Development

Data for this study were collected through a structured self-administered questionnaire distributed online using Google Forms. The online distribution method was chosen to ensure accessibility and efficiency in reaching Generation Z respondents who are active in campus-based investment galleries in one of the university in Bandung, Indonesia. The data collection period took place over four weeks in April 2024. A total of 150 valid responses were obtained through purposive sampling, based on criteria such as age (18–27 years), active membership in a university investment gallery, and prior experience in investment activities. All participants were informed of the purpose of the study and provided their voluntary consent prior to participation.

The questionnaire was developed by adapting indicators from established instruments used in previous empirical studies. The financial literacy construct was measured using items modified from Chen and Volpe (1998), including knowledge of inflation, interest rates, diversification, time value of money, and risk-return tradeoff. Risk tolerance was assessed using items based on Widoatmodjo (2009), capturing attitudes toward uncertainty, loss acceptance, and risk preference. Investment decision-making indicators were adapted from Tandelilin (2010), including return expectations, risk awareness, time horizon, and portfolio adjustment behavior. All items were measured on a 7-point Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). A pilot test involving 30 respondents was conducted to ensure the clarity, reliability, and validity of the questionnaire prior to full deployment.

Data Analysis Techniques

The data analysis in this study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0 software. This method was selected due to its flexibility in analyzing complex models, its effectiveness in predictive research, and its ability to accommodate non-normal data distributions (Hair et al., 2019). The analysis followed a systematic multi-step procedure consisting of evaluation of the measurement model (outer model) and the structural model (inner model).

The outer model evaluation began with the assessment of outer loading values for each indicator, where a loading value of ≥ 0.70 indicates adequate indicator reliability. This was followed by an assessment of internal consistency and convergent validity through Cronbach’s Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). Thresholds of ≥ 0.70 for Cronbach’s Alpha and CR, and ≥ 0.50 for AVE were used as benchmarks. Discriminant validity was then examined using the Fornell–Larcker criterion, ensuring that each construct shared more variance with its indicators than with other constructs.

Following measurement model validation, the structural model was evaluated. The analysis began with the estimation of R-square (R^2) values to determine the proportion of variance in the dependent variable explained by the model. Additionally, effect size (f^2) was calculated to assess the magnitude of each independent variable's contribution. Hypothesis testing was performed using

bootstrapping procedures to assess the statistical significance of the structural path coefficients, including t-values and p-values. A significance level of 5% ($\alpha = 0.05$) was used to determine whether the proposed hypotheses were supported.

RESULTS AND DISCUSSION

As shown in **Table 2**, all reflective indicators exhibit outer loading values above the recommended threshold of 0.70, ranging from 0.703 to 0.803. These results confirm that each indicator reliably represents its corresponding latent construct, thus supporting the convergent validity of the measurement model (Hair et al., 2019).

Table 2 Outer Loadings of Reflective Indicators

Construct	Indicator	Outer Loading
Financial Literacy	FL1 – Knowledge of inflation	0.742
	FL2 – Interest rate understanding	0.781
	FL3 – Time value of money	0.803
	FL4 – Diversification concept	0.769
	FL5 – Risk-return tradeoff	0.755
Risk Tolerance	RT1 – Preference for certainty	0.721
	RT2 – Willingness to take loss	0.739
	RT3 – Confidence in high-risk choice	0.781
	RT4 – Avoidance of risk	0.703
	RT5 – Comfort with volatility	0.767
Investment Decision	ID1 – Return expectation	0.796
	ID2 – Risk consideration	0.803
	ID3 – Investment goal clarity	0.788
	ID4 – Time horizon	0.759
	ID5 – Portfolio adjustment behavior	0.771

Source: Data proceed

Table 3 reports that all constructs demonstrate adequate levels of internal consistency and convergent validity. Cronbach's Alpha values range from 0.860 to 0.888, reflecting strong internal consistency among the indicators. Composite Reliability (CR) values also exceed the commonly accepted threshold of 0.70, confirming the reliability of each latent construct. Furthermore, all Average Variance Extracted (AVE) values are above 0.50, indicating that each construct captures more than half of the variance in its observed indicators. These findings confirm that the measurement model meets the required standards for construct reliability and convergent validity (Hair et al., 2019).

Table 3 Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE
Financial Literacy	0.879	0.879	0.593
Risk Tolerance	0.860	0.860	0.552
Investment Decision	0.888	0.888	0.614

Source: Data proceed (2025)

Discriminant validity is confirmed as the square root of the AVE for each construct (bold diagonal values) exceeds the corresponding inter-construct correlations. This indicates that each construct shares more variance with its own indicators than with other constructs, in accordance with the Fornell–Larcker criterion.

Table 4 Discriminant Validity

Construct	Financial Literacy	Risk Tolerance	Investment Decision	AVE
Financial Literacy	**0.770**	0.426	0.573	0.593
Risk Tolerance	0.426	**0.743**	0.487	0.552
Investment Decision	0.573	0.487	**0.783**	0.614

Source: Data proceed

The coefficient of determination (R^2) for the investment decision construct is 0.456, indicating that financial literacy and risk tolerance together explain approximately 45.6% of the variance in investment decision-making (see **Table 5**). This suggests a moderate level of explanatory power for the structural model, in line with acceptable standards in behavioral research (Hair et al., 2019).

Table 5 R Square

Construct	R^2
Investment Decision	0.456

Source: Data proceed

Effect size (f^2) values are presented in **Table 6**. Financial literacy has an f^2 of 0.248, reflecting a medium effect on investment decision, while risk tolerance shows a smaller but meaningful effect with an f^2 of 0.129. These values imply that both constructs contribute significantly to explaining variations in investment decisions, with financial literacy having a relatively stronger impact. According to Cohen's (1988) guidelines, these effect sizes provide additional support for the relevance of both predictors in the structural model.

Table 6 Effect Size (F Square)

Predictor	Dependent Variable	f^2
Financial Literacy	Investment Decision	0.248
Risk Tolerance	Investment Decision	0.129

Source: Data proceed

The structural model was evaluated through hypothesis testing using the bootstrapping procedure, and the results are summarized in Table 8. The analysis reveals that both proposed hypotheses are statistically supported. The first hypothesis (H1), which posits that financial literacy positively influences investment decision-making, yields a path coefficient of 0.436. This relationship is statistically significant, as indicated by a t-statistic of 6.521 and a p-value of 0.000. The strength of this relationship suggests that individuals with higher levels of financial literacy are more likely to make informed and confident investment decisions. This finding is consistent with the theoretical foundation of Signaling Theory, which emphasizes the role of knowledge in improving decision-making quality in uncertain environments.

The second hypothesis (H2) proposes that risk tolerance also has a significant positive effect on investment decisions. The analysis supports this hypothesis, with a path coefficient of 0.291, a t-

statistic of 3.457, and a p-value of 0.001. Although the effect size is slightly lower than that of financial literacy, the relationship remains statistically significant, indicating that individuals who are more comfortable with financial risk are more inclined to engage in investment activities. These results affirm the importance of psychological factors, as emphasized in Prospect Theory, in shaping individual financial behavior.

Overall, both hypotheses are supported at a 5% level of significance. The findings provide empirical evidence that both cognitive (financial literacy) and psychological (risk tolerance) factors play substantial roles in influencing investment decision-making among Generation Z investors in Indonesia.

Table 7 Hypothesis Testing Results

Hypothesis	Path	Original Sample (β)	Sample Mean	Standard Deviation	t-stat	p-value	Conclusion
H1	Financial Literacy → Investment Decision	0.436	0.432	0.067	6.521	0.000	Supported
H2	Risk Tolerance → Investment Decision	0.291	0.287	0.084	3.457	0.001	Supported

Source: Data proceed

CONCLUSION

This study investigated the influence of financial literacy and risk tolerance on investment decision-making among Generation Z investors who are members of university-based investment galleries in Bandung, Indonesia. Using Partial Least Squares Structural Equation Modeling (PLS-SEM), the results provide empirical support for both hypotheses: financial literacy and risk tolerance each have a significant and positive effect on investment decisions.

The findings suggest that cognitive factors, particularly financial knowledge, empower young investors to make more informed and rational investment choices. At the same time, psychological traits such as risk tolerance enhance their willingness to engage with investment opportunities, even in the presence of uncertainty. Together, these factors account for 45.6% of the variance in investment decisions, highlighting their combined importance in shaping financial behavior among young, digitally native investors.

The implications of this study underscore the need to strengthen financial education programs and promote risk awareness among university students to support responsible participation in capital markets. Future research may consider incorporating additional behavioral factors such as overconfidence, financial self-efficacy, or social influence, as well as expanding the demographic scope beyond Bandung to enhance generalizability.

BIBLIOGRAPHY

Asry, M. M., Surya, A., & Permana, S. (2024). The role of risk tolerance in mediating financial literacy and investment decision: Evidence from young investors. International Journal of Business, Law and Education (IJBLE), 6(1), 121–135. https://doi.org/10.55927/ijble.v6i1.731

Baker, H. K., & Nofsinger, J. R. (2010). Behavioral finance: Investors, corporations, and markets. Hoboken, NJ: John Wiley & Sons.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. The Quarterly Journal of Economics, 116(1), 261–292. https://doi.org/10.1162/003355301556400

Barron's. (2023). Gen Z investors want crypto and big returns. But they need help managing risk. Barron's. https://www.barrons.com/articles/gen-z-investors-risk-advisors-26fe6c1e

Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. Financial Services Review, 7(2), 107–128. https://doi.org/10.1016/S1057-0810(99)80006-7

Gautama, H., & Soma, A. (2025). Financial self-efficacy mediates the influence of financial literacy on investment behavior. Journal of Indonesian Social and Economic Management, 9(2), 201–212. https://jisem-journal.com/index.php/journal/article/view/10643

Grable, J. E., & Lytton, R. H. (1999). Financial risk tolerance revisited: The development of a risk assessment instrument. Financial Services Review, 8(3), 163–181. https://doi.org/10.1016/S1057-0810(99)00041-4

Huston, S. J. (2010). Measuring financial literacy. Journal of Consumer Affairs, 44(2), 296–316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–291. https://doi.org/10.2307/1914185

Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. American Economic Review, 88(3), 537–558. https://www.jstor.org/stable/116848

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. Journal of Consumer Affairs, 44(2), 358–380. https://doi.org/10.1111/j.1745-6606.2010.01173.x

OECD. (2016). OECD/INFE international survey of adult financial literacy competencies. Paris: OECD Publishing. https://www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf

Otoritas Jasa Keuangan. (2022). Survei Nasional Literasi dan Inklusi Keuangan 2022. Jakarta: OJK. https://www.ojk.go.id

Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374. https://doi.org/10.2307/1882010

Susanto, A., Widodo, T., & Maharani, P. (2024). Financial literacy, technological progress, and investment decisions of Gen Z Indonesian investors. Investment Management and Financial Innovations, 21(1), 55–66. https://doi.org/10.21511/imfi.21(1).2024.05

Tandelilin, E. (2010). Portofolio dan Investasi: Teori dan Aplikasi. Yogyakarta: Kanisius.

van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. Journal of Financial Economics, 101(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006

Widoatmodjo, S. (2009). Pendidikan karakter dalam membangun perilaku finansial yang sehat. Jurnal Ekonomi dan Pendidikan, 6(2), 157–165.

Yusup, M., & Gunawan, R. (2024). Financial interest, literacy, and risk tolerance in youth investment behavior. Jurnal Manajemen Bisnis, 11(1), 89–103. https://ejournals.umn.ac.id/index.php/manajemen/article/view/3667