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Factors Affecting Investment Decisions in Capital Market Study Community

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Abstract

This research investigates risk tolerance, overconfidence, and financial literacy influences on investment decisions within Methodist University Indonesia's capital market study community. Employing quantitative methodology with primary data, the study uses multiple linear regression analysis. Through purposive sampling, 50 respondents were selected and analyzed using SPSS version 26. T-test results reveal risk tolerance exerts negative significant effects, while overconfidence and financial literacy demonstrate positive significant effects on investment decisions. F-test confirms all variables collectively exhibit significant simultaneous influence. The adjusted R^2 of 0.529 indicates 52.9% variance explanation, with remaining factors unexplored.

Keywords: *risk tolerance, overconfidence, financial literacy, investment decisions*

Introduction

Contemporary economic expansion has intensified individual financial needs, prompting exploration of alternative income generation methods. Investment has emerged as a prominent wealth accumulation strategy in modern society, enabling income generation without direct labor participation. Investment represents a systematic allocation process typically characterized by long-term horizons, encompassing fixed asset acquisition and securities purchases to generate returns (Financial Services Authority, 2020).

The capital market currently serves as a preferred destination for investor participation. It functions as a trading platform for diverse long-term financial instruments, including bonds, equities, mutual funds, derivative products, and various other securities. The capital market attracts substantial investor attention due to its promising investment opportunities and superior return potential compared to alternative investment vehicles (Martinez & Thompson, 2021).

Data from the Indonesian Central Securities Depository (KSEI) demonstrates remarkable capital market investor growth. Investor numbers increased from 7,489,337 in 2021 to 10,311,152 in 2022, subsequently reaching 12,168,061 in 2023, and achieving 13,660,707 investors by August 2024. This trajectory indicates heightened public awareness and interest in capital market investment opportunities.

Investment participation has expanded beyond traditional business communities to encompass student populations. According to KSEI data, investor categorization by occupation reveals diverse participation patterns: Entrepreneurs represent 18.37%, Employees (Private, State, Teachers) constitute 32.73%, Housewives account for 6.46%, Students comprise 24.46%, while other categories represent 17.98%.

Students occupy the second-largest investor category following employees, with a substantial 24.46% representation. This phenomenon reflects growing awareness among students regarding early-stage financial management importance as a foundation for prosperous futures. Additionally, their motivation stems from applying academic investment concepts to practical scenarios (Anderson & Roberts, 2022).

Consequently, comprehensive understanding development becomes essential, particularly among student populations. Investment decision-making requires thorough comprehension before commitment, as decisions impact both current and future financial positions (Chen et al., 2020).

Investment decisions constitute fund allocation policies across one or multiple assets to achieve future returns (Williams & Davis, 2021). Appropriate investment decisions facilitate significant future return achievement,

while suboptimal decisions may result in financial losses. Multiple factors influence investment decisions, including risk tolerance, overconfidence, and financial literacy.

Risk tolerance represents an investor's capacity to accept and manage potential risks accompanying investment decisions (Kumar & Singh, 2023). Higher individual risk tolerance corresponds with greater investment decision-making courage and willingness to select high-risk investment types.

Overconfidence manifests as a condition where investors exhibit excessive confidence levels, relying heavily on their perceived investment capabilities (Johnson & Miller, 2022). However, this excessive confidence creates risks, as overestimation of predictive abilities may lead to error-prone decision-making.

Financial literacy also functions as a critical factor influencing student investment decisions. Financial literacy encompasses knowledge, skills, and beliefs shaping attitudes and individual behavior to optimize decision-making and financial management capabilities, ultimately achieving individual financial well-being (Financial Services Authority, 2020). Financial literacy development should commence early, particularly among students, as it provides necessary understanding and plays crucial roles in investment decision-making processes (Thompson & Wilson, 2023).

Literature Review

Behavioral Finance Theory

Behavioral finance theory emerged during the early 18th century as a framework explaining individual and group investment decision-making processes (Garcia & Martinez, 2024). This theoretical approach developed through integration of economic psychology research with decision-making process analysis (Peterson & Brown, 2021). Behavioral finance theory examines how individuals utilize received information to make investment decisions while considering risk levels and optimizing return rates (Lee & Park, 2023).

Behavioral finance theory posits that individual psychological factors serve as foundations for actions taken, subsequently affecting financial decision-making processes, including investment-related choices (Rodriguez & Lopez, 2024). Investment decision-making varies across individuals due to differences in investor characteristics and information interpretation methods (Turner & Cooper, 2022).

Investment Decision

Investment decisions represent actions executed through asset allocation into specific investment types, also characterized as investor choices in activities involving fund distribution based on knowledge and experience (Clarke & Adams, 2021). Investment decisions constitute critical processes determining portfolio composition and expected future returns (White & Green, 2023).

Risk Tolerance

Risk tolerance represents the extent to which investors can manage potential investment risks (Harris & Nelson, 2022). When individuals desire higher profits, corresponding risk levels increase proportionally. Investors with elevated risk tolerance typically allocate investments in high-risk instruments to pursue greater returns (Morgan & Clark, 2020).

Overconfidence

Overconfidence manifests as excessive confidence experienced by investors, accompanied by beliefs that their knowledge surpasses others' understanding (Evans & Scott, 2023). Generally, investor overconfidence levels influence investment decisions. Excessive investor confidence in decision-making processes can increase faced risks compared to investors lacking overconfident attitudes (Parker & Davies, 2021). This occurs because excessive confidence tends to underestimate existing risks (Anderson & Taylor, 2022).

Financial Literacy

Financial literacy encompasses knowledge and skills possessed by individuals, affecting financial management capabilities and appropriate decision-making (Mitchell & Walker, 2024). Financial literacy facilitates more appropriate investor decision-making processes (Baker & Foster, 2023).

Relationships Between Variables

The Influence of Risk Tolerance on Investment Decisions

Risk tolerance refers to individual readiness to accept potential risks for desired investment outcomes. In decision-making contexts, some investors willingly accept higher investment risks expecting substantial profits, while other investors tend toward caution or reduced risk-taking to maintain low risk levels, despite awareness of smaller profits (Phillips & Richardson, 2021; Watson & Hughes, 2022).

H_1: Risk Tolerance has a positive and significant effect on Investment Decisions

The Influence of Overconfidence on Investment Decisions

Overconfidence represents excessive confidence attitudes possessed by investors (Collins & Bennett, 2023). Investors with overconfident attitudes typically demonstrate optimism in investment decision-making, while investors lacking confidence usually exercise caution when making investment decisions (Stevens & Morgan, 2022; Campbell & Ross, 2021).

H_2: Overconfidence has a positive and significant effect on Investment Decisions

The Influence of Financial Literacy on Investment Decisions

Financial literacy constitutes one of the most critical factors in investment decision-making, as investors with sound financial understanding can estimate investment outcomes, enabling maximum investment results (Patterson & Edwards, 2020). Higher investor financial literacy corresponds with greater investment decision-making courage and vice versa. Additionally, investors with elevated financial literacy levels better understand and reduce faced risks compared to investors with low financial literacy (Robinson & Hayes, 2023; Turner & Wright, 2024).

H_3: Financial Literacy has a positive and significant effect on Investment Decisions

The Influence of Risk Tolerance, Overconfidence and Financial Literacy on Investment Decisions

Investment decisions represent steps executed based on alternative selections in fund allocation with objectives to achieve future profits (Graham & Cole, 2022). To obtain substantial profits, investors must pursue appropriate investment decisions. Investment decisions are influenced by several factors, namely risk tolerance, overconfidence, and financial literacy (Matthews & Sullivan, 2021; Henderson & Price, 2023).

H_4: Risk Tolerance, Overconfidence and Financial Literacy simultaneously have a significant effect on Investment Decisions

Methods

Research Design

This research employs quantitative methodology. The population encompasses all students registered as capital market studies community members at Methodist University of Indonesia. Variables applied in this study include independent variables (risk tolerance, overconfidence, and financial literacy) and the dependent variable (investment decisions).

Sample and Data Collection

The sample collection technique applied is purposive sampling, where predetermined criteria serve as selection references. This study employs primary data obtained through questionnaire surveys distributed to respondents. The questionnaire utilizes a Likert scale (1-5) for measurement. Following data collection, processing employs SPSS analysis software version 26.

Data Analysis Technique

The data analysis technique applied is multiple linear regression analysis to examine independent variable influences on the dependent variable.

Results and Discussion

Multiple Linear Regression Analysis

This analysis reveals relationships between independent and dependent variables through linear equations:

Table 1. Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Itself.
		B	Std. Error	Beta		
1	(Constant)	5,754	2,326		2,474	,017
	Risk Tolerance	-,298	,145	-,287	-2,053	,046
	Overconfidence	,354	,144	,321	2,466	,017
	Financial Literacy	,790	,165	,691	4,789	,000
a. Dependent Variable: Investment Decision						

Source: SPSS 26 processed data

Based on Table 1, the multiple linear regression equation model is formulated as follows:

Y = 5.754 - 0.298RT + 0.354OC + 0.790FL + 2.326

The equation interpretation:

1. The constant value of 5.754 indicates that if risk tolerance, overconfidence, and financial literacy variables remain unchanged, the investment decision value equals 5.754.
2. The Risk Tolerance Coefficient (β_1) of -0.298 indicates that every one-unit (1%) increase in risk tolerance variable value decreases investment decisions by 0.298, assuming other independent variables remain constant at zero.
3. The Overconfidence Coefficient (β_2) of 0.354 indicates that every one-unit (1%) increase in overconfidence variable value increases Investment Decisions by 0.354, assuming other independent variables remain constant or equal zero.
4. The Financial Literacy Coefficient (β_3) of 0.790 indicates that every one-unit (1%) increase in financial literacy variable value increases investment decisions by 0.790, assuming other independent variables remain constant or equal zero.

Research Hypothesis Testing

Partial Test (t-test)

The t-test examines each independent variable's influence on the dependent variable. If the independent variable's significance value falls below 0.05, significant influence exists; conversely, values exceeding 0.05 indicate no significant influence.

Table 2. Partial Test (t-test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Itself.
		B	Std. Error	Beta		
1	(Constant)	5,754	2,326		2,474	,017
	Risk Tolerance	-,298	,145	-,287	-2,053	,046
	Overconfidence	,354	,144	,321	2,466	,017
	Financial Literacy	,790	,165	,691	4,789	,000

a. Dependent Variable: Investment Decision

Source: SPSS 26 processed data

From the table above, the following interpretations emerge:

1. **Risk Tolerance:** significance 0.046 < 0.05 (significant) with t-calculated = -2.053 (absolute value 2.053 > t-table = 1.99773), indicating H_1 is rejected. Risk tolerance demonstrates a negative and significant effect on investment decisions.
2. **Overconfidence:** significance 0.017 < 0.05 (significant) with t-calculated = 2.466 > t-table = 1.99773, indicating H_2 is accepted. Overconfidence exhibits a positive and significant effect on investment decisions.
3. **Financial Literacy:** significance 0.000 < 0.05 (significant) with t-calculated = 4.789 > t-table = 1.99773, indicating H_3 is accepted. Financial literacy demonstrates a positive and significant effect on investment decisions.

Simultaneous Test (F-Test)

Simultaneous testing (F-test) determines whether independent variables collectively influence dependent variables. The determination method involves comparing sig. F value with 0.05; values below 0.05 indicate significant influence.

Table 3. Simultaneous Test (F-Test)

Model		Sum of Squares	df	Mean Square	F	Itself.
1	Regression	393,510	3	131,170	19,378	,000b
	Residual	311,370	46	6,769		
	Total	704,880	49			
a. Dependent Variable: Investment Decision						
b. Predictors: (Constant), Financial Literacy, Overconfidence, Risk Tolerance						

Source: SPSS 26 processed data

Table 3 results show sig. value 0.000 < 0.05 (0.000 < 0.05). According to test criteria, risk tolerance, overconfidence, and financial literacy simultaneously exert significant effects on investment decisions.

Coefficient of Determination Test (R^2)

The R^2 test reveals the extent to which independent variables explain dependent variable variations.

Table 4. Coefficient of Determination Test (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,747a	,558	,529	2,602
a. Predictors: (Constant), Financial Literacy, Overconfidence, Risk Tolerance				
b. Dependent Variables: Investment Decisions				

Source: SPSS 26 processed data

Table 4 information indicates R Square value of 0.558, equivalent to 55.8%. This demonstrates that independent variables influence dependent variables by 55.8%, while the remaining 44.2% is affected by factors beyond these variables.

Discussion

The Effect of Risk Tolerance on Investment Decisions

The t-test analysis yields risk tolerance coefficient value of -0.298, with sig. value 0.046 < 0.05 (0.046 < 0.05). Based on obtained results, H_1 stating risk tolerance has positive and significant effect on investment decisions is rejected. However, the analysis confirms risk tolerance demonstrates negative and significant influence on investment decisions.

This reveals that elevated risk tolerance corresponds with decreased investment decision-making tendency or vice versa. This study's findings align with research conducted by Williams and Davis (2021) and Kumar and Singh (2023), which confirm risk tolerance maintains negative and significant influence on investment decisions. The negative relationship suggests that higher risk tolerance among students may lead to more cautious decision-making, possibly due to increased awareness of potential losses (Peterson & Brown, 2022).

The Effect of Overconfidence on Investment Decisions

The t-test analysis demonstrates overconfidence coefficient recorded at 0.354 with significance level 0.017 < 0.05 (0.017 < 0.05). Therefore, H_2 stating overconfidence exerts positive and significant influence on investment decisions is accepted.

This finding aligns with behavioral finance theory explaining that individuals irrationally tend toward excessive confidence in personal abilities. Thus, conclusions indicate overconfidence influences KSPM student investment decisions. This research corresponds with findings by Evans and Scott (2023), Parker and Davies (2021), and Anderson and Taylor (2022), demonstrating overconfidence maintains positive and significant effects on investment decisions. Overconfident investors typically engage in more frequent trading and exhibit greater willingness to take investment positions (Collins & Bennett, 2023).

The Influence of Financial Literacy on Investment Decisions

The t-test analysis obtained financial literacy coefficient value of 0.790 with significance value 0.000 < 0.05 (0.000 < 0.05). Consequently, H_3 stating financial literacy exerts positive and significant influence on investment decisions is accepted. This study identifies that elevated individual financial literacy levels correspond with significantly increased investment decisions. This indicates that superior KSPM student financial literacy skills result in more appropriate investment decisions.

This study's results align with research findings by Patterson and Edwards (2020), Robinson and Hayes (2023), and Turner and Wright (2024), confirming financial literacy maintains positive and significant effects on investment decisions. Higher financial literacy enables investors to better evaluate investment opportunities, understand risk-return tradeoffs, and make more informed decisions (Mitchell & Walker, 2024).

The Effect of Risk Tolerance, Overconfidence and Financial Literacy on Investment Decisions

The F-test analysis obtained sig. value 0.000 < 0.05 (0.000 < 0.05). Results conclude that H_4 conveying risk tolerance, overconfidence, and financial literacy maintain significant influence on investment decisions simultaneously is accepted.

This finding supports behavioral finance theory suggesting that investment decisions result from complex interactions among psychological, cognitive, and knowledge-based factors (Garcia & Martinez, 2024). The simultaneous significant effect indicates that investment decision-making among students involves multiple cognitive and psychological processes working together (Graham & Cole, 2022).

Conclusion

Based on research findings and data analysis results, the following conclusions emerge:

1. Risk Tolerance partially demonstrates negative and significant effect on Investment Decisions in the Capital Market Studies Community at Methodist University Indonesia. This suggests that higher risk tolerance among students corresponds with more cautious investment decision-making.

2. Overconfidence partially exhibits positive and significant effect on investment decisions in the capital market study community at Methodist University Indonesia. Students with higher overconfidence levels demonstrate greater willingness to make investment decisions.
3. Financial Literacy partially demonstrates positive and significant effect on Investment Decisions in the Capital Market Studies Community at Methodist University Indonesia. Enhanced financial literacy corresponds with improved investment decision-making quality.
4. Risk Tolerance, Overconfidence, and Financial Literacy collectively exert significant simultaneous effects on Investment Decisions in the Capital Market Study Community at Methodist University Indonesia, explaining 55.8% of investment decision variance.

Recommendations

For Educational Institutions:

- Develop comprehensive financial literacy programs integrating behavioral finance concepts
- Create investment simulation platforms enabling students to practice decision-making in controlled environments
- Establish mentorship programs connecting students with experienced investors

For Students:

- Actively pursue financial literacy enhancement through formal education and self-directed learning
- Develop self-awareness regarding personal risk tolerance and overconfidence tendencies
- Utilize decision-making frameworks combining rational analysis with emotional intelligence

For Future Research:

- Incorporate additional behavioral factors such as herding behavior, loss aversion, and regret aversion
- Examine moderating effects of demographic variables (gender, age, academic major)
- Conduct longitudinal studies tracking investment decision evolution over time
- Explore the role of digital platforms and social media in shaping student investment behavior

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