THE INFLUENCE OF FINANCIAL LITERACY, RISK TOLERANCE, AND EXPERIENCED REGRET ON INVESTMENT DECISIONS

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ABSTRACT

This research aims to investigate the influence of financial literacy, risk tolerance, and experienced regret on individuals' investment asset selection. Understanding these factors in an era of economic complexity is vital to guide informed investment decisions. This research focuses on Management students at Maranatha Christian University, as they represent an educated group likely to engage in investments. Employing a quantitative approach with a descriptive-explanatory method, the study gathers insights into how these variables interact to shape investment preferences. The sample comprises 110 respondents selected using purposive sampling, ensuring that participants meet specific criteria relevant to the research objectives. Data was collected using a structured questionnaire based on a six-point Likert scale to capture nuanced responses. The collected data were analyzed through multiple linear regression using IBM SPSS software to evaluate the relationship and significance of the variables.The findings reveal that financial literacy significantly influences investment decisions, indicating that individuals with a higher understanding of financial concepts tend to make better-informed investment choices. Similarly, risk tolerance plays a crucial role, as individuals' willingness to take risks determines their selection of investment assets. Experienced regret also has a measurable impact, highlighting the psychological aspect of previous investment outcomes on future decisions.This research contributes to the broader understanding of investment behavior, emphasizing the need for financial education and awareness of psychological factors in decision-making. These findings provide valuable insights for educators, policymakers, and financial advisors in designing strategies to enhance financial decision-making skills, particularly among young adults.

Keywords: *financial literacy, risk tolerance, experienced regret*

1. INTRODUCTION

Rapid economic development has led to many aspects moving beyond societal control. Sri Mulyani (2022) highlighted that rising asset prices, such as homes and land, may make it difficult for young people to afford houses in the future (Darisman, 2022). This is due to inflation or the declining intrinsic value of money (Madjid, 2024). One way to preserve money's value is through investment, which involves investing today for potential future returns (Landang et al., 2021). The Indonesia Stock Exchange views this as both a challenge and an opportunity, providing investment education to schools and universities, including Maranatha Christian University, where it regularly conducts classes and seminars (Putri, 2023). The university supports this with courses like “Capital Market and Portfolio Management Investment Analysis” (UKM, 2024) and offers facilities such as a laboratory for technical analysis, a fundamental analysis class, and an investment gallery. The university also collaborates with Sinarmas Securities (SIM INVEST) to help students open investment accounts. Despite these efforts, the success of investments is influenced by factors like financial literacy, risk tolerance, and experienced regret..

Financial literacy plays a significant role because individuals with well-managed financial planning can not only save on expenses but also increase the value of the assets they own (Saputra & Murniati, 2021). This is reflected in data from the OJK, which shows that the investor population in Indonesia is only 4.42 percent (Bineskrasi, 2024). Financial literacy is a basic understanding of how to manage finances and the attitudes towards financial aspects. Financial literacy is a crucial element for individuals and groups to avoid financial problems. On the other hand, those with low levels of financial literacy tend to struggle in understanding the risks and potential returns of various investment instruments (Khairiyati & Krisnawati, 2019).

Investment is inherently full of uncertainty, where investors are always faced with both returns and risks (Wati, 2024). Therefore, Risk Tolerance plays an important role in investment decisions. Risk tolerance reflects how individuals respond to risk (Saputra & Murniati, 2021). Individuals with high risk tolerance will opt for high-return instruments, even if the risks are high, while those with minimal risk tolerance will choose safer instruments with lower returns. The level of comfort with risk when investing depends on each individual's perception, where high risk tolerance often leads to more risky investment decisions (Badriatin et al., 2022).

Another important factor is experienced regret. Experienced regret is the feeling of regret or disappointment that a person experiences due to the investment decisions made, including the risks that arose from those decisions in the past (Hikmah et al., 2020). This regret may arise when someone feels that their investment decision did not yield the expected results, either due to financial losses or missed opportunities. On the other hand, when investors see the results of their investments and are satisfied with their performance, they often feel more confident in taking other investment opportunities in the future (Wulandari & Iramani, 2014).

In this context, this study will focus on how financial literacy, risk tolerance levels, and experience of regret influence the investment behavior of individuals, particularly management students at Maranatha Christian University, in making investment decisions that align with their risk profiles and preferences. (format numbering).

2. RESEARCH METODOLOGY

To obtain reliable, unbiased, and trustworthy answers to the questions, the research method must be capable of discovering and investigating new facts (Ummah, 2019). This study employs a quantitative approach with a descriptive-explanatory method to analyze the correlation between independent variables, namely "Financial Literacy" (X1), "Risk Tolerance" (X2), and "Experienced Regret" (X3), and the dependent variable, which is "Investment Decision" (Y)
In a quantitative study, the population includes objects or subjects that possess specific qualities and criteria to be researched. The population in this study consists of students from the "Management Study Program at Maranatha Christian University" from the 2021 cohort, totaling 149 individuals. The sample was selected using the purposive sampling method based on the criteria of 2021 students who have taken the "Capital Market" course. Based on Slovin's formula, the sample size is 110 individuals. This method ensures that the respondents are relevant to the research topic (Sugiyono, 2020).
This research collects data through a questionnaire utilizing a six-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree" (Hamid, 2019). The questionnaire was distributed online using Google Forms to the selected respondents. The independent variables, namely "Financial Literacy" (X1), "Risk Tolerance" (X2), and "Experienced Regret" (X3), were each measured through several question items, while the "Investment Decision" (Y) variable was assessed based on three specific items.

The data was analyzed using IBM SPSS version 21 through the following steps: validity and reliability tests to ensure the instruments are accurate and consistent, the Kolmogorov-Smirnov normality test for data distribution, multicollinearity tests (Tolerance and VIF) to identify correlations between variables, the Glejser method for heteroskedasticity testing, and multiple linear regression to evaluate the impact of independent variables on the dependent variable (Hamid, 2019). This approach ensures reliable and objective results.

3. LITERATUR REVIEW

Behavioral finance theory

According to Tversky and Kahneman (1974), behavioral finance is the study of the impact of human psychology on the actions of market participants in the financial sector. This field discusses theories and experiments that focus on what happens when investors make decisions based on intuition or emotions (Kamoune et al., 2022). This theory explains that low financial literacy can make individuals more susceptible to cognitive or emotional biases, which then affect the quality of investment decisions.

Prospect theory

In (1979) , Kahneman and Tversky introduced Prospect Theory explains that individuals tend to make choices based on their perception of gains and losses, rather than on absolute outcomes (Prosad et al., 2015). This theory explains that people tend to walk away from losses more than they do from equivalent gains. When facing risks, individuals tend to exhibit inconsistent behavior: they are more likely to take risks in the face of losses and avoid risks when there are gains. Prospect Theory is relevant in explaining how risk tolerance varies among individuals when they face investment opportunities involving risk. When investment decisions result in losses, the experience of regret can amplify individuals' sensitivity to losses. This regret drives more cautious behavior or, conversely, more impulsive behavior in subsequent investment decisions.

Both of these theories establish a strong theoretical framework for analyzing how factors such as Financial Literacy, Risk Tolerance, and Experienced Regret influence individual investment decisions.

Hypotheses

Financial literacy

Studying financial services, institutions, and products is at the core of financial literacy. Financial literacy also helps individuals become better money managers by changing their mindset and actions (Safryani et al., 2020). In terms of influencing an individual's investment decision-making behavior, financial literacy is more important than socio-demographic considerations (Hasanudin et al., 2022). This is different from the study by Wardani & Lutfi (2019), which revealed that investment decisions are not significantly affected by financial literacy, as investment decisions are more influenced by other variables such as risk tolerance. Based on existing research, the relevant hypothesis is as follows :

H1: Financial literacy has an effect on students' investment decisions.

Risk tolerance

Risk Tolerance reflects the extent to which an investor can handle uncertainty and potential losses that may arise from investment decisions (Zakaria & Megawati, 2022). An investor's risk tolerance, or their reaction to risk, is a key factor in determining investment strategies and the capital used. Many investors tend to actively seek risk or passively avoid it (Putra et al., 2016). This finding is also supported by a study conducted by Wardani, which shows that risk tolerance has a significant and positive impact (Wardani & Lutfi, 2019). In contrast, research by Wiyanto (2022) states that the level of risk tolerance faced by each individual does

not affect their psychology when making investment decisions. Based on existing studies, the relevant hypothesis is as follows :
H2: Risk tolerance positively influences students' investment decisions.

Experienced regret
Experienced regret is the feeling of disappointment and remorse that an individual experiences as a result of a past investment decision. This feeling arises from previous experiences, where individuals feel unprepared to face the risks that came with those investment decisions (Hikmah et al., 2020). One conclusion is that those who have experienced regret are more likely to choose higher-risk investment options because they have faced it before. As a result, individuals tend to be more cautious when deciding to invest in the future (Adiputra, 2023). On the other hand, research shows that experienced regret has no impact because respondents invest in low-risk assets (Wulandari & Iramani, 2014). Therefore, this study presents the following hypothesis :
H3: Experienced regret has a positive influence on students' investment decisions.

4. RESULTS AND DISCUSSION

Table 1. Respondent Data

Category	Subcategory	Respondent Precentage (%)
Gender	Male	68.5%
	Female	31.5%
Age	20-22	62.3%
	23-25	37.7%
Batch	2021	100

Source: (SPSS Results, 2024)

The respondent data shows that the majority of respondents are male (68.5 percent) compared to female (31.5 percent). In terms of age, most of the respondents fall within the 20-22 years range (62.3 percent), while the remaining respondents are aged 23-25 years (37.7 percent). All respondents are from the 2021 cohort (100 percent).

Table 2. Validity Test of All Variables

Variable	Total Item	Validity
Financial Literacy (X1)	5	Valid
Risk Tolerance (X2)	4	Valid
Experienced Regret (X3)	3	Valid
Investment Decision (Y)	3	Valid

Source: (SPSS Results, 2024)

The validity test is a method used to assess whether the data from the research object can be considered valid and relevant for analysis and reporting by the researcher (Sugiyono, 2020). Based on the test results, all items are considered "valid" as the obtained coefficient values are bigger than 0.187.

Table 3. Reliability Test of All Variables.

Variable	Cronbach Alpha	Description

Financial Literacy (X1)	0.789	Reliable
Risk Tolerance (X2)	0.749	Reliable
Experienced Regret (X3)	0.704	Reliable
Investment Decision (Y)	0.743	Reliable

Source: (SPSS Results, 2024)

The reliability test is used to measure the level of trust in the instrument, ensuring that it provides consistent and accountable results. Based on the presented table, all variables show adequate reliability values, as the Cronbach's alpha scores are bigger than 0.6 (Hamid, 2019).

Table 4. SPSS Output of Normality Test

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	110
Asymp. Sig. (2-tailed)	.200[c,d]

Source: (SPSS Results, 2024)

The normality test ensures that sample data has a "normal distribution," a key assumption in linear regression. Using the Kolmogorov-Smirnov method via SPSS, Ghozali (2018) states that data is normal if the Asymp. Sig. is greater than 0.05. The test yielded an Asymp. Sig. of 0.200, confirming that the data is normally distributed.

Table 5. SPSS Output of Heteroscedasticity Test

Variable	B	t	Sig.
(Constant)	1.291	2.105	0.038
Financial Literacy (X1)	0.058	1.420	0.158
Risk Tolerance (X2)	-0.054	-1.154	0.251
Experienced Regret (X3)	-0.027	-0.482	0.631
a. Dependent Variable: ABS_Res			

Source: (SPSS Results, 2024)

According to Ghozali (2018), the heteroskedasticity test detects differences in residual variance in a regression model. An ideal model shows no signs of heteroskedasticity. If the significance (Sig.) is greater than 0.05, heteroskedasticity is not detected; if it's less than 0.05, it is detected. Based on SPSS analysis, the Sig. scores for Financial Literacy (X1) is 0.159, Risk Tolerance (X2) is 0.251, and Experienced Regret (X3) is 0.631. Thus, the regression model shows no signs of heteroskedasticity.

Table 6. SPSS Output Multicollinearity Test

Variable	Tolerance	VIF
Financial Literacy (X1)	0.343	2.918

Risk Tolerance (X2)	0.364	2.749
Experienced Regret (X3)	0.431	2.320
a. Dependent Variable: Investment Decision		

Source: (SPSS Results, 2024)

Multicollinearity occurs when independent variables in a regression model are highly correlated, potentially affecting the accuracy of results (Hamid, 2019). A model is considered free from multicollinearity if the VIF score is less than 10. Based on the analysis, all VIF scores are below 10, and tolerance scores are close to 1, indicating that the model does not exhibit multicollinearity.

Table 7. SPSS Output Multiple Linear Regression

Variable	Coefficient	Uji t	Sig.
Constant	-0.263	-0.264	0.793
Financial Literacy (X1)	0.238	3.576	0.001
Risk Tolerance (X2)	0.302	3.953	0.000
Experienced Regret (X3)	0.205	2.259	0.026
a. Dependent Variable: Investment Decision			

Source: (SPSS Results, 2024)

According to Sugiyono (2020), to predict the shift of the dependent variable from the shift of two or more independent variables (predictors), one can use multiple linear regression analysis. The multiple regression equation obtained in this study is as follows:

Y = a + b1x1 + b2x2 + b3x3
Y = -0.263 + 0.238 X1 + 0.302 X2 + 0.205 X3

Explanation:
X1 = Financial Literacy, X2 = Risk Tolerance, X3 = Experienced Regret, and Y = Investment Decision

Based on the regression equation, it can be explained that the constant value of Y is -0.263 when the scores of X1, X2, and X3 remain unchanged. Additionally, for every unit increase in X1, Y increases by 0.238, assuming X2 and X3 stay constant. Similarly, for every unit increase in X2, Y increases by 0.302, while keeping X1 and X3 constant. Lastly, for every unit increase in X3, Y increases by 0.205, assuming X1 and X2 remain unchanged.

Table 7.1 Output SPSS Uji T Partial

Variable	B	Std. Error	t	Sig.
(Constant)	-0.263	1.000	-0.264	0.793
Financial Literacy (X1)	0.238	0.066	3.576	0.001
Risk Tolerance (X2)	0.302	0.076	3.953	0.000
Experienced Regret (X3)	0.205	0.091	2.259	0.026

Source: (SPSS Results, 2024)

According to Ghozali (2018), the t-test is used to evaluate the individual effect of each independent variable on the dependent variable. An independent variable is considered to have a significant effect if the calculated t value exceeds the t table value or if the t-test significance value is less than 0.05. Based on the t-test results, it can be concluded that all three independent variables significantly influence investment decisions. Financial Literacy (X1) has a calculated t value of 3.576, exceeding the t table value of 1.983, with a significance of 0.001, confirming its significant impact. Risk Tolerance (X2) has a calculated t value of 3.953, also greater than the t table value of 1.983, with a significance of 0.000, indicating its significant influence. Experienced Regret (X3) has a calculated t value of 2.259, exceeding the t table value of 1.983, and a significance of 0.026, confirming its significant effect as well. Therefore, all three variables significantly affect investment decisions.

Table 7.2 SPSS Output Simultaneous F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	540.429	3	180.143	71.851	.000[b]
	Residual	265.761	106	2.507		
	Total	806.191	109			

a. Dependent Variable: Investment Decision

b. Predictors: (Constant), Experienced Regret, Risk Tolerance, Financial Literacy

Source: (SPSS Results, 2024)

According to Ghozali (2018), the F test evaluates the simultaneous impact of independent variables on the dependent variable and assesses model feasibility at a 5percent significance level. If the F test significance is below 0.05, the model is feasible; otherwise, it is not. The SPSS output shows a calculated F value of 71.851, exceeding the F table value of 2.69 (df = 106), with a significance of 0.000, less than 0.05. These results confirm that Financial Literacy, Risk Tolerance, and Experienced Regret significantly influence Investment Decisions, making the regression model feasible.

The findings of this study indicate that Financial Literacy, Risk Tolerance, and Experienced Regret have a significant simultaneous effect on the investment decisions of students at Maranatha Christian University. Among the variables, risk tolerance has the largest effect. This is consistent with previous research that shows similar findings (Hasanudin et al., 2022; Hikmah et al., 2020; Putra et al., 2016; Safryani et al., 2020; Zakaria & Megawati, 2022).

5. CONCLUSION

Based on the study findings regarding the influence of financial literacy, risk tolerance, and experienced regret on the investment decisions of students from the Management Study Program at Maranatha Christian University, several conclusions can be summarized. Firstly, financial literacy has a significant impact on students' investment decisions. Secondly, risk tolerance is a key factor that significantly influences these decisions. Thirdly, experienced regret positively and significantly affects the students' investment choices. Lastly, when examined simultaneously, financial literacy, risk tolerance, and experienced regret collectively have a significant influence on students' investment decisions.

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