"Cryptocurrency investment: Evidence of financial literacy, experience, and risk tolerance"

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CRYPTOCURRENCY INVESTMENT: EVIDENCE OF FINANCIAL LITERACY, EXPERIENCE, AND RISK TOLERANCE

Abstract

The growing popularity of cryptocurrency as an investment choice among millennials demonstrates their inclination toward digital advancements and openness to exploring diverse investment opportunities. The study examines how financial literacy factors impact experience regret, investment decisions, and risk tolerance, while financial literacy also affects investment decisions, with experience regret and risk tolerance acting as a mediator. The study comprises 295 participants from the millennial demographic in Indonesia who are engaged in cryptocurrency investment. The data collection techniques employed in this study involve non-probability sampling methods through the distribution of questionnaires. The analysis in this study employs Structural Equation Modeling (SEM) in conjunction with Partial Least Squares (PLS) analysis tools. The results of this study suggest that financial literacy positively impacts regret experience, investment decisions, and risk tolerance with the respective sample values of 0.146, 0.397 and 0.449. Additionally, regret experience negatively influences investment decisions with a sample value of –0.385, while risk tolerance positively influences investment decisions with a sample value of 0.198. Financial literacy has a negative impact on investment decisions when regret experience acts as a mediator with a sample value of –0.056, but a positive impact when risk tolerance serves as a mediator with a sample value of 0.089. This complex relationship highlights the importance of considering multiple factors, including financial literacy, regret experience, and risk tolerance, in understanding and predicting investment decisions among individuals, particularly in the context of the millennial generation investing in cryptocurrency in Indonesia.

Keywords	financial literacy, experience regret, financial behavior, investment decision
JEL Classification	G11, G32, G40, G41

INTRODUCTION

In recent years, the cryptocurrency market has gained significant traction worldwide, with investors seeking to diversify their portfolios and capitalize on the potential for high returns. In Indonesia, the rise of digital currencies has been particularly pronounced, with a growing number of individuals, especially millennials, actively participating in cryptocurrency trading (Yang et al., 2022). However, the decision to invest in cryptocurrencies is often influenced by various factors, including an individual's level of financial literacy and their risk tolerance (Monrat et al., 2019).

Financial literacy, which encompasses an understanding of financial concepts, the ability to manage personal finances, and the confidence to make informed financial decisions, plays a crucial role in shaping investment behavior. Individuals with higher levels of financial literacy are more likely to make well-informed investment decisions, including those related to cryptocurrency investments (Rooij et al.,

2007). In contrast, those with lower financial literacy may be more susceptible to impulse-driven or ill-informed investment decisions, potentially leading to regret and financial losses.

The relationship between financial literacy, risk tolerance, and cryptocurrency investment decisions is particularly relevant in the Indonesian context. Indonesia's rapidly growing economy and the increasing popularity of digital currencies among the country's large millennial population have created a unique investment landscape (He et al., 2021). Understanding how financial literacy and risk tolerance influence cryptocurrency investment decisions in Indonesia can provide valuable insights for policymakers, educators, and financial institutions seeking to promote responsible and informed financial decision-making (Chu et al., 2016).

Furthermore, the experience of regret, which can arise from poor investment decisions, is another factor that may influence future cryptocurrency investment decisions. Individuals who have experienced significant losses or regret due to their cryptocurrency investments may become more risk-averse, leading them to reevaluate their investment strategies and potentially avoid or reduce their exposure to cryptocurrency markets (Manullang et al., 2021). Conversely, those who have had positive experiences with cryptocurrency investments may be more inclined to continue or even increase their participation in the market (Grinblatt & Keloharju, 2000).

1. LITERATURE REVIEW

Investment is the activity of investing or placing capital in an asset to gain a profit. Investment can be made in two types of assets, namely real assets and financial assets. Real assets are investments whose physical assets can be seen, such as buildings, land, and gold. Financial assets, on the other hand, comprise bonds, stocks, cryptocurrencies, and time deposits, among others. Investors make investment selections based on a variety of factors or unconventional strategies in an effort to increase their earnings down the road. An investment decision is a policy that a person experiences regarding how they should allocate their funds to various forms of investment to obtain higher profits in the future (Jain et al., 2021).

Investment decisions require consideration because investment decisions have a long-term time dimension. Moreover, investment activities are risky activities, meaning that investment activities do not always bring profits; in fact, investors can also suffer losses, so investment decisions need to receive more attention and be careful (Rosa & Mukhibad, 2022). Investment management, expected return, and actual return are different things. The amount of profit investors anticipate making in the future is known as the anticipated return, whereas the actual return is the amount of profit that has actually been made. Investing activities are inherently fraught with risk. Risk is the potential for a return that is not as high as anticipated (Rong et al., 2023). Investors who are willing to bear high risks are likely and entitled to get high returns, but investors who are not willing to bear high risks cannot expect high returns (Yusfiarto, 2020).

Financial literacy is knowledge about finance and the ability to apply it. A person with strong financial literacy would typically be able to select assets that carry a high degree of risk and yield great returns (Widyastuti et al., 2021). According to the Financial Authority Services Institute, the purpose of financial literacy is, by definition, to educate Indonesians in the area of financial management so they can handle their money wisely. In addition, the public won't be duped by the availability of short-term goods that generate large profits without considering the hazards, and the low degree of information about the financial sector may be addressed.

Financial literacy is inherent and intersects with human life. Effective financial planning for the future can result from having a strong understanding of finance (Widagdo & Sa'diyah, 2023). A strong understanding of finance reduces the likelihood that future financial issues may arise. Low income is not the only factor contributing to financial challenges; poor money management practices, such as not making a financial plan or using credit cards carelessly, can also cause issues
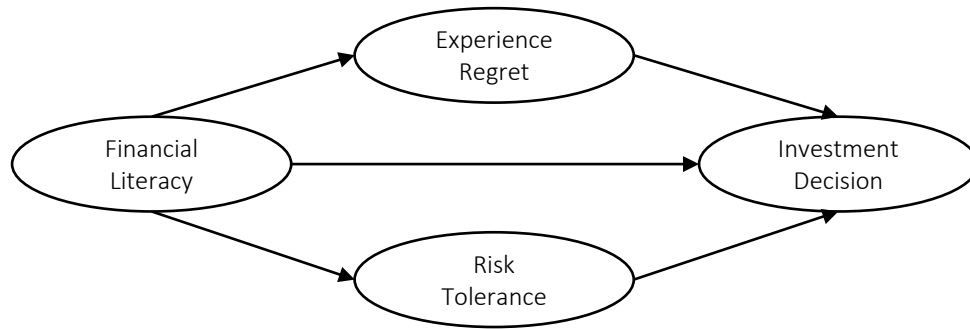
Figure 1. Framework of reference research

(Muizzuddin et al., 2017). Financial literacy and knowledge are crucial because they enable people to organize their own finances to optimize earnings and the time worth of money. own financial issues may also lead to stress and low self-esteem (Atkinson & Messy, 2012). The level of financial literacy depends on an individual's knowledge about how to allocate financial resources, identify sources of expenditure, manage asset risks, and prepare for future financial security when unemployed or retired (Satiti & Sa'diyah, 2020).

In this case, financial literacy has a close relationship with individual financial management, which includes appropriate investment decisions, financing decisions, and asset management (Lusardi & Mitchell, 2014). Financial literacy is a combination of two dimensions. The first dimension is the extent of understanding the financial aspects, and the second dimension is the application of the understanding to life. What this means is that individuals must have self-confidence in applying their financial understanding in making financial decisions (Sujono et al., 2023).

Every financial activity has a certain amount of risk because there is never a 100% certainty that investors will earn. Risk is a consequence or impact that arises due to uncertainty; this risk takes the form of the risk of loss. According to Pak and Mahmood (2015), risk tolerance is defined as the maximum amount of uncertainty that can be accepted or tolerated in making investment decisions.

The degree to which investors are willing to take on financial risks is known as their risk tolerance (Cesarini et al., 2010). High or low tolerance levels

play an important role in the type of investment that will be chosen. Shares are a type of investment instrument that has the characteristic of high risk, but the level of profit that will be received is also high. This is different from investing in deposits, which have a low-risk characteristic, but the level of profit provided is also low and tends to be fixed (Kumar & Goyal, 2015).

When a person has a negative experience, it can lead to feelings of regret or disappointment when it comes to choosing an investing strategy or even taking on the risk of a prior investment decision's outcome. Experienced regret is remorse that results from previous investing errors that affect choices made about future investments (Edison & Aisyah, 2023).

Investors who have a high level of experienced regret are defined as having had a lot of investment experience and having been involved in the investment world for a long time so that they can learn from their past experiences to make better investments in the present and be more careful; thus, they are classified as risk-averse investors (Ramadhan & Sutrisno, 2022). Someone who has experienced regret will be more careful in investing in investments with high returns and high risks, and they will take into account the risks posed by the investments they choose.

By exploring the relationship between financial literacy, risk tolerance, experience of regret, and cryptocurrency investment decisions in Indonesia, this study aims to provide a comprehensive understanding of the factors that shape the investment behavior of Indonesian investors in the digital currency market.

2. METHOD

This study combines an explanatory research method with a quantitative approach to explain the relationships between the variables under investigation and their relative positions. The millennial generation in Indonesia makes of the study's population. The sample in this research is the millennial generation who carry out cryptocurrency transactions in Indonesia. The number of samples in this study was 295 respondents. The sampling approach used is called a non-probability sampling method, which means that not every element or member of the population has an equal chance of being chosen to be a sample member.

This study employed purposive sampling, which selects samples according to predetermined standards or factors. The data used in this study are primary data. Data obtained directly from research subjects as a source of the information sought, through direct surveys conducted by distributing questionnaires. The data measuring tool in this research uses a 5-level Likert scale. This study uses PLS-SEM as a data analysis method with the help of SmartPLS software. PLS-SEM is an alternative method for structural equation modeling in simultaneously testing the relationship between latent constructs in linear and non-linear relationships with many indicators in either reflective or formative form.

Based on the results of research through questionnaires distributed to 295 respondents from the millennial generation in Indonesia aged 17 to 40 years, characteristics were obtained, which included gender, regional origin, age, status/occupation, income earned, applications used, and length of the investment.

Table 1. Description of respondent characteristics

Basis of Classification	Sub-Classification	Frequency	
		Absolute	**Percentage**
Gender	Male	226	77%
	Female	69	23%
	Total	295	100%
Region of Origin	Java/Bali/Nusa Tenggara	200	68%
	Kalimantan	39	13%
	Sumatra	26	9%
	Sulawesi	25	8%
	Papua and Maluku	5	2%
	Total	295	100%

Basis of Classification	Sub-Classification	Frequency	
		Absolute	**Percentage**
Age	17-22	55	19%
	23-28	172	58%
	29-34	63	21%
	35-40	5	2%
	Total	295	100%
Occupation	Architect	39	13%
	Lecturer	3	1%
	Consultant	2	1%
	Lawyer	5	2%
	Student	69	23%
	Civil servant	20	7%
	Trader	21	7%
	Businessman	58	20%
	Private sector employee	78	26%
	Total	295	100%
Income level	Less than IDR 10,000,000	127	43%
	More than IDR 50,000,000	7	2%
	IDR 30,000,000 - IDR 50,000,000	34	12%
	Rp. 10,000,000 - IDR 30,000,000	127	43%
	Total	295	100%
Applications Used	Binance	76	26%
	Binance, Indodax	11	4%
	Binance, Tokocrypto	13	4%
	Binance, Tokocrypto, Indodax	15	5%
	Indodax	55	19%
	Tokocrypto	109	37%
	Tokocrypto, Indodax	16	5%
	Total	295	100%
Length of investment	13 years	148	50%
	35 years	33	11%
	Less than 1 year	112	38%
	More than 5 years	2	1%
	Total	295	100%

Note: N = 295 (sample size).

Based on the data in Table 1, the majority of respondents in terms of gender are male, with a percentage of 77%. The majority of respondents, 68%, came from Java/Bali/Nusa Tenggara. Of the millennial generation who filled out the questionnaire based on age, the majority, 58%, were in the 23–28-year age range. Furthermore, looking at their status/occupation, the largest proportion work as private employees, with a percentage of 26%. Judging from the amount of income, income less than IDR 10,000,000 and income rang-

ing from IDR 10,000,000 to IDR 30,000,000 both have a percentage of 43%. Based on the application used and the length of investment, the majority of respondents used the Tokocrypto application, with a one to three-year investment term with returns of 37% and 50%, respectively.

3. RESULTS

SEM PLS was then used to examine the respondent data. SEM, or structural equation modeling, is a potent statistical method for deciphering intricate correlations between variables. After processing the data analysis using SmartPLS 3, it produces the outer loading values in Table 2.

Table 2. Outer loading results

Question Item	Experience Regret	Financial Literacy	Investment Decision	Risk Tolerance
X1.1		0.686		
X1.2		0.618		
X1.4		0.618		
X1.5		0.601		
X1.6		0.659		
X2.2	0.530			
X2.3	0.807			
X2.4	0.927			
X3.1				0.806
X3.3				0.845
Y1.2			0.863	
Y1.3			0.797	
Y1.4			0.809	
Y1.5			0.820	
Y1.6			0.743	

Every variable indicator item in the study had an outer loading value of more than 0.5, according to the data displayed in Table 2., meaning that all variable indicator items are declared valid. The variables Experience Regret, Financial Literacy, Investment Decision, and Risk Tolerance have met the requirements for convergent validity, with the outer loading value of these four variables > 0.5, so the convergent validity test has been achieved and is valid.

Apart from testing validity, the outer model is also assessed by testing the reliability of the construct. Testing the reliability of a construct can be done in two ways, namely with Cronbach's Alpha and Composite Reliability. A Cronbach's Alpha value and Composite Reliability value > 0.6 are declared

reliable. Presented in Table 3 are the results of the composite reliability calculations.

Table 3. Results of Cronbach's alpha and composite reliability analysis

Research Variable	Cronbach's Alpha	Composite Reliability
Experience Regret	0.908	0.809
Financial Literacy	0.867	0.773
Investment Decisions	0.652	0.903
Risk Tolerance	0.682	0.811

Based on Table 3, the results obtained for Cronbach's alpha and composite reliability values have shown that all latent variable or construct values have > 0.60. In this way, all latent variables have good reliability and meet the specified requirements; therefore, they can continue with structural model testing.

The structural model (Inner Model) will be tested by looking at the value of R-Square (R2) and predictive relevance (Q2). R-Square values of 0.021, 0.322, and 0.202, respectively, indicate that the model is weak and moderate (Chin, 1998). The R-Square test is carried out to find out how much influence the independent variable has on the dependent variable. Presented in Table 4 are the results of the R-Square calculation using SmartPLS 3.

Table 4. R-square analysis results

Research Variable	R-Square	R Square Adjusted
Experience Regret	0.021	0.018
Investment Decisions	0.322	0.315
Risk Tolerance	0.202	0.199

Table 4 shows that variations in Investment Decisions are explained by variations in Financial Literacy, Experience of Regret, and Risk Tolerance of 32.2%; thus, the model is classified as weak. The Experience Regret variation explained by the Financial Literacy variation has an R-Square value of 2.1%; thus, the model is classified as weak. The Risk Tolerance variation explained by the Financial Literacy variation has a value of 20.2%, so the model is classified as weak.

The significance test aims to see the direction of the direct influence and significance of the variables being studied, which can be done by look-
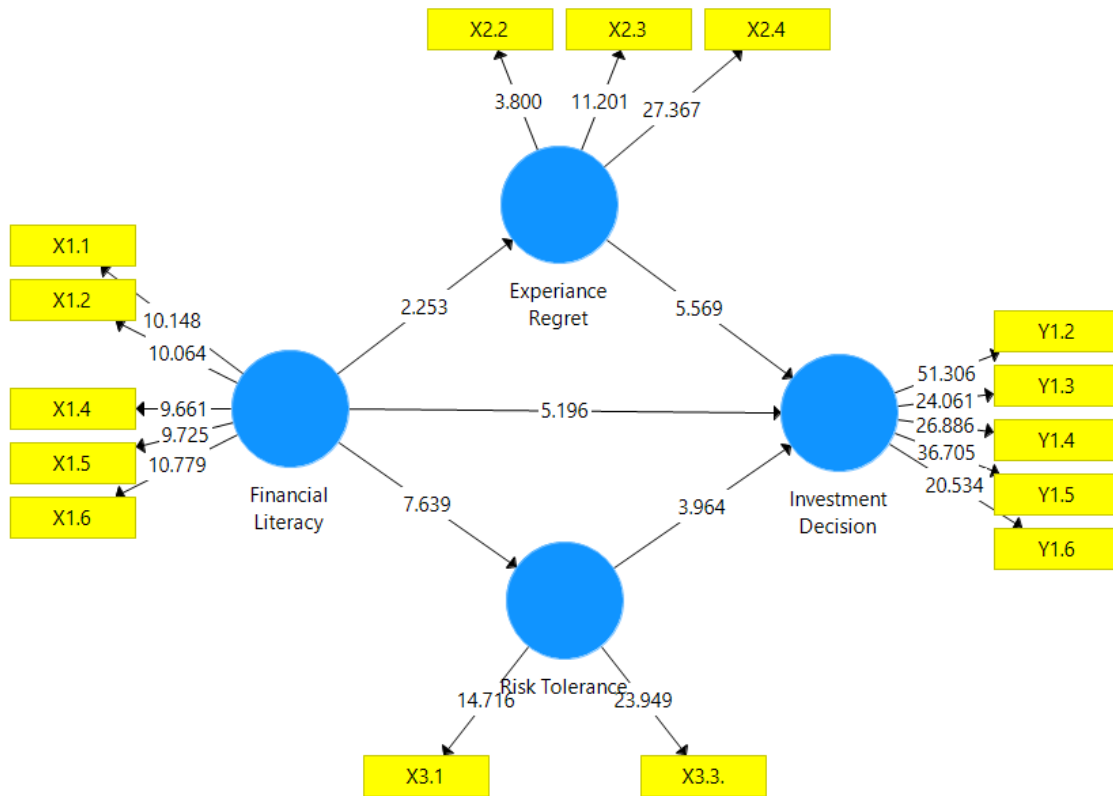
Figure 2. PLS algorithm processing results

ing at the values between latent variables in the path coefficient. The bootstrapping method in this study uses a t-statistic significance value of >1.96 and p-values <0.05. Table 5 presents the results of the calculation of the direct influence significance test

With an initial sample value of 0.146, the Financial Literacy construct variable for Experience Regret has a positive t-statistic value of 2.253 and a p-value of 0.025. It may be inferred that the Financial Literacy variable significantly positively affects the likelihood of experience regret, and that hypothesis 1 is therefore accepted. The construct variable for Financial Literacy in Investment Decisions has a positive initial sample value of 0.397, a t-statistic value of 5.151, and a p-value of 0.000. Therefore, it can be said that hypothesis 2

is accepted and that there is a substantial positive relationship between the Financial Literacy variable and Investment Decisions.

With a positive initial sample value of 0.449, a t-statistic value of 7.639, and a p-value of 0.000, the construct variable Financial Literacy towards Risk Tolerance is well-defined. Therefore, it can be said that hypothesis 3 is accepted and that there is a substantial positive relationship between Risk Tolerance and the Financial Literacy variable. With an initial sample value of –0.385, the Experience Regret construct variable for Investment Decision has a negative t-statistic value of 5.569 and a p-value of 0.000. As a result, hypothesis 4 is declared to be valid; nonetheless, it is determined that the Experience Regret variable significantly negatively affects Investment Decisions. The initial sample

Table 5. Results of the direct effect significance test

Direct Effect	Original Sample	T-Statistics	P-Values
Experience Regret (ER) → Investment Decision (ID)	−0.385	5.569	0.000
Financial Literacy (FL) → Experience Regret (ER)	0.146	2.253	0.025
Financial Literacy (FL) → Investment Decision (ID)	0.397	5.151	0.000
Financial Literacy (FL) → Risk Tolerance (RT)	0.449	7.639	0.000
Risk Tolerance (RT) → Investment Decision (ID)	0.198	3.964	0.000

Table 6. Mediation significance test results

Indirect Effect	Original Sample	T-Statistics	P-Values
Financial Literacy (FL) → Experience Regret (ER) → Investment Decision (ID)	−0.056	2,148	0.032
Financial Literacy (FL) → Risk Tolerance (RT) → Investment Decision (ID)	0.089	3.156	0.002

value of the Risk Tolerance construct variable for Investment Decisions was 0.198, indicating a positive outcome. The t-statistic value was 3.964, and the p-value was 0.000. It may be inferred that the Risk Tolerance variable significantly influences Investment Decisions, and that hypothesis 5 is therefore accepted.

The Financial Literacy construct variable on Investment Decisions through Experience Regret, as a mediating variable, has an original sample value of −0.056, a t-statistic value of 2.148, and a p-value of 0.032, according to the testing findings. hypothesis 6 is therefore declared to be accepted, however it is determined that Experience Regret, using the entire mediation categorization, can mediate the negative and substantial effect of the link between Financial Literacy and Investment Decision. With risk tolerance acting as a mediating variable, the Financial Literacy construct variable on investment decisions had an initial sample value of 0.089, a t-statistic value of 3.156, and a p-value of 0.002. Therefore, it can be said that hypothesis 7 is accepted and that Risk Tolerance, with a complete mediation categorization, may mediate the impact of the link between Financial Literacy and Investment Decision favorably and considerably.

4. DISCUSSION

Based on the analysis, it is known that Financial Literacy has a positive and significant effect on Regret Experience. The interpretation of the hypothesis test results is that the better an individual's Literacy regarding personal finances, the greater the individual's Regret Experience, especially through observation. Millennials tend to expand their literacy and have a good understanding of savings. This understanding can be a motivation for them to behave more intelligently so that they can prevent bad experiences that cause disappointment with financial management. It is believed that a strong understanding of the importance of savings and positive financial practices to-

day can change their financial conditions in the future. The newest thing in this research is that there has been no previous research that discusses the relationship between Financial Literacy variables and Experienced Regret. However, several journal articles, books, and theories have proven the relationship and connection between the knowledge a person has and the regret that may occur after a person behaves (Bell, 1982). Individuals who have financial knowledge tend to have a better understanding of the relationship between risk and return on investments. They have more ability to evaluate risks related to various investment options and are more rational in making decisions. Thus, there is a smaller chance of regret being experienced due to the decision taken, because an indepth analysis has been carried out. A knowledgeable person will be better able to evaluate the actions to be taken and adjust them to financial goals and risks. This can help reduce the likelihood of a person experiencing regret from making decisions that do not align with one's goals. By having a solid understanding of concepts such as asset allocation, diversification, and risk management, investors can develop more solid investment strategies. This can help reduce future regrets because investors have carefully considered financial goals and taken steps to achieve them (Pompian, 2011).

It is established that Financial Literacy has a favorable and significant impact on Investment Decisions based on hypothesis testing results. The interpretation of the results of hypothesis testing is that the higher an individual's Financial Literacy, the more careful they will be in their attitude toward the investment decisions they choose. This interpretation illustrates that the millennial generation already has high financial knowledge, and they always integrate this understanding into the decisions they make regarding their financial management. Based on the characteristics of the respondents, most of them have income levels in the range of 10 million to 30 million, so they tend to be careful in managing their finances to have the right investments. This income level, which is classified as middle to upper, requires the millen-

nial generation to be wiser in determining investment instruments, as well as to pay attention to security to increase the assets they own and avoid inflation. This reflects the principle of prudence needed in dealing with financial dissatisfaction so that they remain able to face challenges and maintain personal financial stability, especially in the future. The results of the hypothesis test support the research conducted by Suresh (2021), Mishra (2018), Adil et al. (2022), Iram et al. (2021), Dewi et al. (2021), DAT (2020), and Mubaraq et al. (2021), which suggests that financial knowledge can influence financial attitudes. These results also contradict the results of studies by Senda et al. (2020), Hamza and Arif (2019), and Ademola et al. (2019), which state that Financial Literacy does not affect Investment Decisions.

Considering the outcomes of the hypothesis test, it is known that Financial Literacy has a positive and significant effect on Risk Tolerance. The interpretation of the results of hypothesis testing is that the greater the Financial Literacy an individual has, the higher the Risk Tolerance. Based on the characteristics of the respondents, the majority of the millennial generation still have the status of private employees, who generally have personal income. This status makes caution in behavior a guide for the millennial generation in deepening their knowledge of wise and intelligent financial management methods. Having a high level of literacy will encourage them to tend to understand that investment risk can be adjusted to individual profiles and the amount will follow the return contained therein. In general, the millennial generation will adjust their risk profile by choosing the right type of investment to minimize the gap regarding risk and return. The results of hypothesis testing support research by Kanagasabai and Aggarwal (2020), Samsuri et al. (2019), Noviarini et al. (2021), Mishra (2018), Ademola et al. (2019), and Dewi et al. (2021), which indicates that these two factors, financial literacy and risk tolerance, have a link.

Experiencing regret is recognized to have a negative and considerable impact on investment decisions, as evidenced by the hypothesis test results. Interpretation of the research results shows that the lower the level of individuals' experience related to regret or bad experiences when investing and

managing their investments, the higher the influence on Investment Decisions. This suggests that people with a history of investment failures and regrets will typically be better at managing their assets and coming to sound financial judgments because of the knowledge they have gathered from past mistakes. Good financial behavior among the millennial generation, such as deciding to invest in high-risk investment instruments and getting disappointing results, shows that they have experienced the importance of choosing investment vehicles that are more selective and in line with their risk profile. This action reflects a proactive attitude towards financial management, especially in making investment decisions that can provide financial protection in the face of unexpected situations. A positive belief in the success of financial management drives this. Through a combination of positive beliefs and wise financial behavior toward financial management, the millennial generation has a strong foundation for achieving financial stability and building financial sustainability in the long term. The results of hypothesis testing support the study by Budiyanto and Sari (2023), which stated that there is a significant negative influence on the relationship between Experience Regret and Investment Decisions, but this also is in line with Dewi et al. (2021), who state that Experience Regret can positively and significantly influence Investment Decisions. Thus, experiencing regret is one factor in improving an individual's ability to plan and manage finances, which in turn can determine positive investment decisions.

Risk tolerance is recognized to have a favorable and substantial impact on investment decisions based on the outcomes of hypothesis testing. Interpretation of the research results shows that individuals who have positive Risk Tolerance tend to make better Investment Decisions. This illustrates how investors who have risk tolerance, understand the risk profile and understand the concept of investment will make wiser investment decisions regarding the money they have, so this plays an important role in shaping and influencing their attitudes, actions, and Investment Decisions.

A positive attitude towards risk tolerance in financial planning can have a positive impact on the investment decisions of the millennial generation. The decision to determine relevant risks, especial-

ly to have a return for the future, especially when facing unexpected circumstances, reflects good motivation in personal financial management. The results of hypothesis testing support the research conducted by Raheja and Dhiman (2019), Samsuri et al. (2019), Mishra (2018), Ademola et al. (2019), Dewi et al. (2021), and Mubaraq et al. (2021), which explains that Risk Tolerance influences Investment Decisions. In increasing the quality of individual Risk Tolerance, it is important to understand the factors that shape their Investment Decisions. However, the studies by Ady and Hidayat (2019) and Yulianis et al. (2021) suggest that Risk Tolerance does not influence Investment Decisions.

Experience regret substantially and negatively modulates the association between financial literacy and investment decisions, according to the results of hypothesis testing. The experience of past investment misplacements and several investment failures provides benefits related to personal financial management and good investment decisions that are believed to encourage positive financial behavior, including good financial literacy so that investment fund management can be maximized. The importance of experiencing regret as a mediator proves that the experience of failure does not make a person withdraw from investment decisions but rather provides more confidence that previous failure experiences can be a valuable lesson in finding a more appropriate investment vehicle. This can provide extra encouragement in translating Financial Literacy into concrete action. Good understanding and experience regarding investment can be more effectively implemented in positive Investment Decisions when supported by highly Experienced Regret. The newest thing in this study is that there has been no previous research that discusses the relationship between Financial Literacy variables and Experience Regret. However, several journal articles, books, and theories have proven the relationship and connection between the knowledge a person has and the regret that may occur after a person behaves (Bell, 1982). Individuals who have financial knowledge tend to have a better understanding of the relationship between risk and return on investments. They have more ability to evaluate risks related to various investment

options and are more rational in making decisions. Thus, there is a smaller chance of regret being experienced due to the decision taken, because an in-depth analysis has been carried out. A knowledgeable person will be better able to evaluate the actions to be taken and adjust them to financial goals and risks. This can help reduce the likelihood of a person experiencing regret from making decisions that do not align with one's goals. By having a solid understanding of concepts such as asset allocation, diversification, and risk management, investors can develop more solid investment strategies. This can help reduce future regrets because investors have carefully considered financial goals and taken steps to achieve them (Pompian, 2011).

Risk Tolerance mediates the association between Financial Literacy and Investment Decisions favorably and considerably, according to the results of hypothesis testing. The millennial generation is a generation that can access a lot of information easily. This has an impact on how easy it is to learn about financial literacy. When someone understands financial literacy, this is accompanied by an understanding of risk and return. Risk is divided into several parts that are usually known as risk profiles. Someone who understands financial literacy will easily understand individual risk profiles so that they better understand each person's risk tolerance. The more tolerant a person is towards the risk of an investment, the more investment decisions they will make. Good risk tolerance can mediate the relationship between financial literacy and investment decisions. It can be proven that when someone understands individual risk tolerance, then that person can be said to have understood one aspect of financial literacy, namely regarding risk, so this will encourage them to be more precise in determining investment vehicles that are suitable and safe for these individuals. This is reinforced by research findings that highlight the importance of an effective educational approach in increasing the millennial generation's development of positive risk tolerance and financial literacy. The results of this hypothesis testing are strengthened by Kanagasabai and Aggarwal (2020), Dewi et al. (2021), Samsuri et al. (2019), and Mishra (2018), who show that Financial Literacy influences Investment Decisions, with the role of Risk Tolerance as a mediator.

CONCLUSIONS

The study comprehensively demonstrates the significant impact of financial literacy on various facets of financial decision-making and behavior among millennials. It reveals that enhanced financial literacy not only positively influences investment decisions and risk tolerance but also plays a crucial role in shaping the experience of regret associated with financial decisions. Specifically, a higher degree of financial understanding leads to more prudent investment choices, increased tolerance for investment risk, and a nuanced experience of regret which, in turn, informs future financial decisions. The findings underscore that financial literacy acts as a foundational element that enables individuals to evaluate investment risks more rationally, adopt a more cautious approach toward investment decisions, and develop resilience to financial setbacks by learning from regrettable financial experiences. Furthermore, the mediating roles of experienced regret and risk tolerance between financial literacy and investment decisions highlight the complex interplay between knowledge, emotional response, and behavior in financial management.

AUTHOR CONTRIBUTIONS

Conceptualization: Chalimatuz Sa'diyah, Bambang Widagdo, Fika Fitriasari.
Data curation: Chalimatuz Sa'diyah, Fika Fitriasari.
Formal analysis: Chalimatuz Sa'diyah, Fika Fitriasari.
Metodology: Chalimatuz Sa'diyah, Fika Fitriasari, Bambang Widagdo .
Project administration: Bambang Widagdo, Chalimatuz Sa'diyah.
Software: Fika Fitriasari, Chalimatuz Sa'diyah.
Supervision: Fika Fitriasari, Chalimatuz Sa'diyah .
Validation: Chalimatuz Sa'diyah, Fika Fitriasari, Bambang Widagdo .
Writing – original draft: Bambang Widagdo, Chalimatuz Sa'diyah, .
Writing – review & editing: Chalimatuz Sa'diyah, Bambang Widagdo.

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