Enhancing Investment Intention through Return and Risk: The Role of Financial Technology Among Millennial Generation

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Abstract

Purpose: *Although fintech adoption is increasing, investment participation among Indonesian millennials remains limited, partly due to persistent concerns about risk and varying expectations of return. Existing studies also show inconsistent findings on how risk and return shape investment interest. Therefore, this study aims to examine the effects of perceived risk and perceived return on investment intention and to evaluate whether fintech moderates the relationship between perceived risk and investment intention.*

Methods: *An explanatory quantitative design was applied using path analysis with SEM PLS. The study involved 170 millennial respondents selected from PT Brantas Abipraya. The research instrument measured investment interest, fintech, perceived risk, and perceived return, adapted from validated constructs in previous studies. Key features of the analysis included model measurement, structural assessment, and evaluation of the moderating effect of fintech.*

Results: *The findings indicate that perceived risk negatively affects investment interest, while perceived return shows a significant positive effect. The moderating influence of fintech on the relationship between perceived risk and investment interest was found to be insignificant. The results highlight that perceptions of risk and return remain the primary drivers of investment decisions, regardless of fintech adoption.*

Implications: *The study suggests the need to strengthen financial literacy and reduce perceived risk, particularly through fintech platforms, to enhance capital market participation among the younger generation. Further research should examine external determinants of investment behavior and incorporate longitudinal approaches to capture changes over time in investment interest.*

INTRODUCTION

The Indonesia Stock Exchange (Q1 2025) reported that the number of Single Investor Identification (SID) reached 17,016,329, or approximately 6.85% of the total population, marking an 11.42% increase compared to the end of 2024, which recorded 14,871,639 SID (IDX, 2025). This increase reflects a growing public awareness of the importance of investment as a means to achieve long-term financial goals. However, this number remains low in comparison to other Asian countries, such as China, with 200.15 million investors. (14.13% of population) and Singapore, which has 30%-40% of its population participating in investment (Antara News, 2025; CNBC, 2024).

This highlights a gap in public understanding and participation in the capital market in Indonesia. While the rising SID numbers indicate a positive shift, there remains untapped potential, particularly concerning the more equitable distribution of investment interest across various societal strata, which could drive greater individual participation and optimize the nation's economic growth. In making investments, investors need to adopt an appropriate. strategy

with careful consideration, including the selection of suitable investment instruments or products to achieve optimal returns. Return or yield is one of the critical factors that drive individual interest in investing. This is evidenced by a 2022 Populix survey, which found that 64% of investors' primary goal for investing is to prepare funds for the future (Populix, 2022). Furthermore, high returns are often viewed as an indicator of investment success and serve as a major attraction for investors when choosing investment instruments. This is consistent with the research by Bustami & Dewi (2021), which found that return has a significant impact on investment interest. This finding is also supported by Merkoulva & Veld (2022), who discovered that individuals with an optimistic outlook on ROI tend to be greater interest in investing, with a 16.4% increase in participation probability.

Interestingly, the return on investment (ROI) is not always the primary factor for individuals to engage in investing. Annamalah et al. (2019) argue that the investment returns in mutual funds do not have a significant impact on the investment behavior of Malaysian investors, as past returns cannot guarantee the expected returns in the present. This finding is further supported by the behavior of crypto investors, who, despite the uncertainties such as high price volatility and the lack of clear regulation, remain unaffected in their investment interest (Kala & Chaubey, 2023). Given the inconsistency of findings regarding the influence of returns on investment interest, further research is needed to reassess the role of returns in influencing investment interest, particularly in the highly dynamic and uncertain financial markets. The Future of Money survey, conducted by Dali Research, a multinational survey institution in collaboration with LUNO in 2020, explored financial behaviors across several countries, including Indonesia. The survey results revealed that approximately 69% of respondents in Indonesia did not have any investment strategy when engaging in investment activities (Kompas, 2020). As a result, many investors in Indonesia experienced losses in their investments. Ajzen (1991), in his Theory of Planned Behavior, explains that one of the factors influencing individual interest is the environmental factor or subjective norms. This suggests that the failures of other investors can have a ripple effect on potential investors, leading them to assume that investing is a risky activity, which ultimately decreases their interest in actually investing. However, Kumar et al. (2024) and Hossain & Siddiqua (2022) present contrasting findings, asserting that the risk of failure does not necessarily diminish investment interest; rather, it depends on the type of investor and how they perceive the risk.

While numerous studies on investment interest have been conducted, the inconsistency in the findings highlights a gap in the existing literature, further emphasizing the need for additional research to examine the relationship between risk levels and investment interest. This would help in gaining a clearer and more definitive understanding of the factors influencing investment interest. The level of risk in investment fundamentally depends on the individual assessment of potential investors, which is heavily influenced by their understanding of the selected investment products (Quang et al., 2023). With the advent of Industry 4.0, access to information, which was once limited, has become more accessible due to technological advancements, particularly devices such as gadgets and smartphones.

The Indonesia Stock Exchange, as one of the primary platforms in the capital market, facilitates investment transactions more easily through online applications and live trading provided by the securities companies where investors are registered (IDX, 2024). This ease is further reinforced by advancements in financial technology (fintech), which allow potential investors to more easily access market information and a variety of investment product options

(Priyadarshi et al., 2024). However, there has been limited prior research examining the role of fintech in managing investment risk levels and its influence on investment interest.

Therefore, amidst the increasingly complex dynamics of the financial market and high investment uncertainty, there is an urgent need for research to reexamine the impact of returns and risk levels on investment interest, particularly in Indonesia, where capital market participation remains relatively behind compared to other Asian countries. Furthermore, this study offers novelty by integrating the perspective of financial technology as a moderating variable, thereby not only enriching academic understanding but also providing practical recommendations for regulators and investors to promote more inclusive and sustainable investment inclusion. The gap in investment interest between the millennial generation and Generation Z, resulting from suboptimal perceptions of risk and return, as well as their dependence on technology-driven information that has not been fully utilized, also forms the basis for this research. Thus, the findings of this study are expected to serve as a strategic foundation for enhancing financial literacy, optimizing the potential of the capital market, and driving Indonesia's economic growth in the face of the ever-evolving digital era.

The Prospect Theory

Prospect Theory, introduced by Kahneman and Tversky (1979), posits that individuals evaluate risky choices based on changes in value relative to a reference point and tend to exhibit loss aversion, whereby losses are perceived more intensely than equivalent gains. The theory subsequently became a foundational pillar of behavioral finance because it captures the systematic deviations from rationality observed in investor behavior, including probability weighting distortions and the tendency to avoid risk when situated within a loss frame (Edwards, 1996). Over more than three decades of application, Prospect Theory has demonstrated robust explanatory power for various market anomalies such as the disposition effect and investors' preference for highly risky, lottery-like assets (Barberis, 2013).

Recent empirical evidence further reinforces its relevance in emerging markets; for example, Wang et al. (2021) show that Prospect Theory–based parameters significantly predict stock returns in China's B-share market, while findings by van Dolder and Vandenbroucke (2024) indicate that investors' levels of loss aversion are closely aligned with their portfolio risk profiles. Accordingly, Prospect Theory serves as a highly pertinent theoretical foundation for this study, as it directly elucidates how perceived risk may diminish investment intention and how perceived return can stimulate individuals' propensity to invest—particularly among millennial investors who navigate market uncertainties and increasingly rely on information mediated through financial technology.

Hypotheses Development
Perceived Risk on Intention to Invest

Risk refers to the potential for loss or the discrepancy between expectations and reality. In line with the research by Aren & Hamamci (2020), risk is a situation where the possible outcomes of a decision can be known or estimated. In investment, risk denotes the uncertainty of results, where an investor must assess the level of risk they are willing to accept before making an investment. Aren & Hamamci (2020); Shobaik & Elshaer (2023) further argue that risk is typically

calculable, in contrast to uncertainty, which involves unknown or difficult-to-predict variables that cannot be easily quantified. An investor must estimate the level of acceptable risk before deciding to invest (Cao et al., 2021). Therefore, the inherent perceived risk in an investment product significantly influences an investor's interest in investing. Putri & Hamidi (2019) state that the higher the perceived risk, the lower the investment interest that may arise.

A contrasting result was found in the study by Wi & Anggraeni (2020), where perceived risk did not influence investment interest. Instead, investment interest was more influenced by curiosity and recommendations from others, such as friends or family (Ahmed et al., 2022). Furthermore, this dynamic can also be viewed through the lens of Prospect Theory, which offers a deeper understanding of how investors respond to perceived risk, particularly with the avoidance of losses being more dominant than the pursuit of gains (Kahneman & Tversky, 1979).. Based on the explanation above, the hypothesis that can be formulated is as follows:

H1: Perceived Risk has a negative effect on Investment Interest.

Perceived Return on Intention to Invest

Perceived return refers to the investor's subjective expectation of financial gain—whether expected or already realized, from the investment in an asset. According to Brigham & Houston (2016), return reflects the profit generated from the invested capital, while Kartini & Nahda (2021) distinguish between actual return (realized profits) and potential return (expected future profits). In this study, we interpret these notions as components shaping perceived return at the individual level. The sources of return are divided into two categories: yield (routine income such as dividends) and capital gain (profits from asset price increases). However, research shows varying results regarding the impact of perceived return on investment interest. Some studies (Bustami & Dewi, 2021; Bhatia et al., 2021) state that higher returns increase investment interest, particularly among millennials and students. In line with the study by Elfahmi et al. (2020), investors view investment as a financially beneficial opportunity, where knowledge of potential returns is positively related to investment interest. This finding is also consistent with Prospect Theory (Kahneman & Tversky, 1979), which suggests that investors are more responsive to potential returns, as they tend to be motivated by expected profits. This theory further reinforces the relevance of the finding that perceived return positively influences investment interest, especially when investors perceive profit opportunities as attractive.

Meanwhile, other studies (Dewi et al., 2022; Widati et al., 2022) argue that perceived return alone is not sufficiently influential, as behavioral factors and market conditions also play a significant role. The relationship between perceived return and investment interest becomes increasingly complex due to psychological and social influences. Research conducted by Yang et al. (2021) and Hwang & Lee (2020) also suggests that psychological biases, such as following the behavior of the majority of investors, significantly impact investment interest. Ibrahim & Arshad (2018) and Akhtar & Das (2019) found the presence of a social effect, where the success of other investors can motivate individuals to invest, thus linking perceived return with subjective norms. On the other hand, behavioral finance theory indicates that investors may place greater emphasis on risk tolerance, financial literacy, or ethical factors rather than solely focusing on profit.. Therefore, the hypothesis that can be formulated is:

H2: Perceived Return has a positive effect on Investment Interest.

Moderation Effect of Financial Technology

Fintech is a new innovation that combines technological capabilities to manage finances with the aim of increasing efficiency and effectiveness (Bank Indonesia, 2019). One of the services provided by fintech is the capital market (Lee & Shin, 2018). The presence of fintech has facilitated easier access to information and transparency regarding the financial market conditions, which ultimately increases the investment interest of the millennial generation (Arhan et al., 2024; Putri & Triputrajaya, 2024), as fintech has the ability to provide real-time financial market data, thereby increasing trust and fostering interest in investing (Amelia et al., 2024). In other words, the presence of fintech can reduce the perceived risk associated with the selected investment products because potential investors have adequate information regarding financial market conditions, which in turn enhances their investment interest.

This aligns with the research by Fadika & Indra (2024), which found that the existence of fintech as a financial product can improve the investment decisions made by potential investors. Through fintech platforms, investors can access market data and analysis, , enabling them to make informed decisions to minimize the perceived risk of losses. However, there has been limited prior research addressing the role of fintech in moderating the impact of perceived risk levels on investment interest. As a result, the millennial generation has shown limited participation in utilizing fintech technology for investing (Asyarofah et al., 2023). Therefore, based on the explanation above, the hypothesis that can be formulated is as follows:

H3: Fintech negatively moderates the effect of Perceived Risk on Investment Interest.
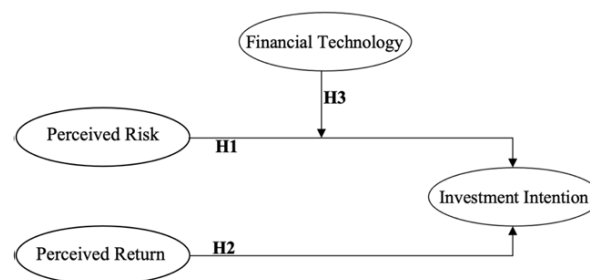
METHODS

This study employs an explanatory quantitative approach, aimed at explaining the causal relationships between the variables being investigated. The population in this study consists of all millennial employees of PT. Brantas Abipraya. The selection of this population is based on the initial investigation conducted by the researcher regarding the investment behavior of millennial employees at PT. Brantas Abipraya, who tend to focus on the risk of investment products and their return rates. The total population consists of 360 employees. For data collection, the questionnaire will utilize a 1-5 Likert scale. The researcher will use an appropriate sampling technique to gather representative data through probability sampling with a simple random sampling technique. The study will also establish criteria for potential respondents, where respondents must be employees of PT. Brantas Abipraya within the millennial age range (29 to 44 years), and they must have an SID and actively engage in investment activities within the last 5

years. Based on the formulation by Hair et al. (2019), the minimum sample size for this study is 170 respondents.

The research instrument used to measure the Investment Interest variable is based on the studies by Pajar & Pustikaningsih (2017) and Hanifah & Yuningsih (2021), adapting five items such as "Interest," "Curiosity," "Time allocated to learn," "Trying to invest," and "Confidence." Meanwhile, to measure the Financial Technology variable, this study adapts three items from Rahardjo (2019), namely "Knowledge of Fintech," "Knowledge of Fintech Advantages," and "Motivation to Use Fintech." Furthermore, to measure the Perceived Risk variable, this study adapts five items from Fahmi (2015) and Soemitra (2023), including "Purchasing power risk," "Business risk," "Interest rate risk," "Market risk," and "Liquidity risk." For the Perceived Return variable, the study adapts four items from Brigham & Houston (2016) and Burhanudin (2021), namely "Attractive returns," "Risk and return," "Return considerations," and "Dividends and Capital." This research employs path analysis with the SEM-PLS (Structural Equation Modeling - Partial Least Squares) approach, which allows the researcher to observe the relationships between variables and the paths between the variables involved in the research constructs. The path analysis involves several stages, such as examining the outer loading values to assess the contribution of indicators to the variables, testing the reliability and validity of the model, and finally testing the relationships between paths using the bootstrapping method to obtain more accurate estimates of the significance of the relationships between variables. Referring to Hair et al. (2019), the measurement of the research model involves several stages: model specification, model identification, analysis of offending estimates, and model fit testing.

In the model specification phase, the focus is on developing a model that assumes the relationships between one latent variable and another. During this phase, the SEM components are combined and illustrated through a path diagram. In the measurement model evaluation phase, Hair et al. (2019) explain that the data will be tested for internal reliability consistency, which includes the composite reliability value (>0.7) and Cronbach's alpha value (>0.6). The data will also be tested for convergent validity, which includes ensuring the loading factor is above 0.7 (>0.7) and the average variance extracted (AVE) value exceeds 0.5 (>0.5). The final test in the measurement model evaluation phase is to examine discriminant validity, which involves analyzing the Heterotrait-Monotrait Ratio of Correlations (HTMT) value, which should be below 0.9 (<0.9). Once all values in the measurement model evaluation phase meet the predetermined standards, the researcher will proceed to the structural model evaluation phase (Hair et al., 2019). In this phase, the data will be tested for predictive relevance based on the Standardized Root Mean Square Residual (SRMR) value, which should fall within the range of 0.08 to 0.1, as well as analyzing the R^2 value. The R^2 value is considered good if it exceeds 0.5 (>0.5), as the R^2 value ranges from 0 to 1, with the closer the value is to 1, the better the model. Finally, the last test in the structural model evaluation phase is to analyze the hypothesis testing results, where the p-value significance should be below 0.05 (<0.05) or the T-statistic should exceed 1.96 (>1.96).

RESULTS AND DISCUSSION

Based on the demographic data presented, the majority of respondents in this study are male, accounting for 81% (137 individuals), while females represent 19% (33 individuals). In terms of

age, the group aged 31-37 years dominates with 51% (86 individuals), followed by the 24-30 age group at 32% (54 individuals), and the 38-44 age group at 18% (30 individuals). Regarding the investment period, 46% of respondents have invested for more than 3 years (79 individuals), 32% have between 1-3 years of investment experience (55 individuals), and 21% have less than 1 year of investment experience (36 individuals). Concerning investment types, the majority of respondents invest in stocks, with 50% (85 individuals), followed by mutual funds at 17% (29 individuals), deposits at 14% (24 individuals), gold at 12% (21 individuals), and cryptocurrency at only 6% (11 individuals). This data provides an overview of the respondents' background, with most being experienced investors, primarily preferring stocks. Furthermore, the data collection will be assessed into two-steps statistical evaluation. Hair et al. (2022) mentioned that the statistical analysis using structure equation modelling consists of evaluation of measurement model and structural model.

Evaluation of Measurement Model The assessment of the measurement model is conducted to evaluate the extent to which the research instrument is valid & reliable. The reliability of the data will be evaluate through the indicator reliability and internal consistency reliability as can be seen below.

Table 1. The Result of Indicator and Internal Consistency Reliability

Variable	Item	LF	CA	CR	
				Rho_A	Rho_C
Financial Technology	Knowing the various types of fintech available for investment	0.973	0.985	0.988	0.988
	Experiencing the benefits of the convenience offered by fintech	0.969			
	Interested in using fintech apps to simplify investment	0.967			
	Trusting that the data provided by fintech platforms is transparent and accurate	0.976			
	Feeling more confident in investing with the support of fintech technology	0.974			
Intentention to Invest	Interested in learning more about investments	0.974	0.986	0.986	0.989
	Frequently searching for investment information	0.975			
	Allocating specific time to understand investment opportunities	0.974			
	Trying to invest in various instruments	0.967			
	Confident that investment can help achieve financial goals	0.978			
Perceived Risk	Not worried that inflation will reduce the purchasing power of investments in the future	0.971	0.985	0.987	0.988
	Not concerned that the financial condition of the companies in which I invest will affect the value of my investments	0.975			
	Not worried that changes in interest rates will negatively impact the value of my investments	0.970			
	Not concerned about market fluctuations that may affect the value of my investments	0.971			
	Not worried about the difficulty of liquidating my investments when needed	0.965			
Perceived Return	Understanding that investing will provide attractive returns	0.975	0.982	0.982	0.986

Variable	Item	LF	CA	CR	
				Rho_A	Rho_C
	Understanding that investing involves risk and return	0.969			
	Believing that returns are an important consideration before investing	0.978			
	Understanding that investing will generate dividends or capital gains	0.972			

*LF = Loading Factor (>0.708), CA = Cronbach's Alpha (>0.6), CR = Composite Reliability (>0.7)

Referring to Table 1, all items are considered reliable since their loading factors exceed the threshold of 0.708 (Hair et al., 2019). The highest loading factor items within each variable are crucial in representing the core aspects that best define the constructs. In the Financial Technology variable, the item with the highest loading factor of 0.973 highlights the understanding of various fintech types available for investment, a critical component of the construct. For Intention to Invest, the highest loading factor of 0.978 reflects the belief that investments can help achieve financial goals. When it comes to Perceived Risk, the item with a loading factor of 0.975 indicates a lack of concern about the financial stability of the companies in which an individual invests, which suggests a perception of low risk. Finally, within Perceived Return, the highest loading item, at 0.978, emphasizes the importance of returns as a key factor in making investment decisions. The reliability analysis confirms that all variables in this study meet the reliability criteria, with Cronbach's Alpha values greater than 0.6 and Composite Reliability values above 0.7. Intention to Invest demonstrates the highest reliability, with a Cronbach's Alpha of 0.986 and Composite Reliability of 0.986, followed closely by Financial Technology and Perceived Risk. Furthermore, in order to evaluate the data validity, this study will assess its convergent and discriminant validity which can be seen in the Table 2 below.

Table 2. The Result of Convergent and Discriminant Validity

Variable	Convergent Validity (AVE)	Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT)			
		Financial Technology	Intention to Invest	Perceived Risk	MOD FT*Perceived Risk -> Intention to Invest
Financial Technology	0.944				
Intention to Invest	0.948	0.260			
Perceived Risk	0.942	0.409	0.346		
MOD FT*Perceived Risk -> Intention to Invest	1.000	0.054	0.073	0.035	
Perceived Return	0.948	0.334	0.574	0.033	0.073

As presented in Table 2, all variables demonstrate strong convergent validity, with Average Variance Extracted (AVE) values exceeding the 0.5 threshold. Intention to Invest resulting the highest value of an AVE which is 0.948 reflecting a high degree of convergent validity. Financial

Technology shows the convergent validity with an AVE of 0.948, indicating its validity, similarly, Perceived Risk displays solid convergent validity with an AVE of 0.942. To assess discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) is employed as an alternative approach. A value below 0.85 is considered adequate for ensuring discriminant validity.

The results reveal that all HTMT values between the variables fall well below the 0.85 threshold, supporting adequate discriminant validity. Specifically, the HTMT values for Financial Technology and Intention to Invest (0.260), Financial Technology and Perceived Risk (0.409), and Intention to Invest and Perceived Risk (0.346) all suggest distinct constructs. Additionally, the HTMT values between Perceived Return and Intention to Invest (0.334), Financial Technology (0.574), and Perceived Risk (0.033) further validate this conclusion. Therefore, the constructs in this model are clearly distinct from one another. The researcher has chosen to report only the HTMT results for assessing discriminant validity, as it has been shown to be more reliable than other metrics for this purpose (Hair et al., 2022). As all the evaluation of the measurement model has been completed and fulfilled the minimum threshold, the analysis will be continued to evaluate the structural model. To evaluate the structural model, several parameters need to be considered, including the collinearity, explanatory power of the model, effect size, and hypothesis testing.

Table 3. Coefficient Determination

Construct	R-Square	R-Square Adj
Intention to Invest	0.511	0.499

Table 3 presents the coefficient of determination (R^2) analysis, Given that the R^2 Adjusted value in this study is 0.499, the result falls into the moderate category. This suggests that the model explains a reasonable proportion of the variance in Intention to Invest, but there is still a significant portion (about 51.1%) of the variance that is influenced by factors not included in the model or external variables not captured by the study. This moderate explanatory power indicates that while the model provides valuable insights into the determinants of Intention to Invest, additional factors or variables may need to be considered to increase the model's predictive accuracy and further explain the remaining variance.

Table 4. Model Fit

Criterion	Saturated Model	Estimated Model
SRMR	0.018	0.018
d_ULS	0.063	0.063
d_G	0.207	0.208
Chi-Square	211.752	212.760
NFI	0.965	0.965

Based on the results presented in the table 4, both models (Saturated Model and Estimated Model) show very similar values across most criteria. The SRMR (Standardized Root Mean Square Residual) for both models is 0.018, indicating a good fit between the model and the data. The d_ULS (Unweighted Least Squares discrepancy) and d_G (Geodesic discrepancy) show values of 0.063 and 0.208, respectively, suggesting no significant differences in model fit. The Chi-Square at 211.752 and 212.760, indicating that both models provide similar results in terms of accuracy. Finally, the NFI (Normed Fit Index) for both models is 0.965, indicating that both models have an excellent fit with the data. Overall, the difference between the estimated model and the more complex (saturated) model is minimal, suggesting that the estimated model is sufficiently adequate.

Table 5. The Result of Hypothesis Testing, Effect Size, and Collinearity Statistics

Hypothesis	Original Sample (O)	F²	VIF	Sample Mean (M)	STDEV	T Statistic	P Value	Result
Direct Effect								
(H1) Perceived Risk -> Intention to Invest	-0.473	0.379	1.208	-0.472	0.061	7.720	**0.000**	Supported
(H1) Perceived Return -> Intention to Invest	0.482	0.414	1.147	0.478	0.059	8.151	**0.000**	Supported
Moderating Effect								
(H3) MOD FT Perceived Risk -> Intention to Invest	0.039	1.012	0.003	0.037	0.054	0.726	**0.234**	Rejected

*F2 = Effect Size, VIF = Variance Inflation Factor (result of collinearity statistics), STDEV = Standar Deviation

Table 5 above is representing the result of the hypothesis testing from H1 to H3. The hypothesis 1 examines the impact of Perceived Return on Intention to Invest (H1), shows a strong effect ($f^2 = 0.414$), with a T-Statistic of 8.151 and a p-value of 0.000, indicating that this hypothesis is supported. Hypothesis 2 examines the impact of Perceived Risk on Intention to Invest (H2), shows a moderate effect ($f^2 = 0.379$), with a T-Statistic of 7.720 and a p-value of 0.000, which is also supported. Lastly is the hypothesis 3, which tests the moderating effect of MOD FT on the relationship between Perceived Risk and Intention to Invest (H3), shows a very small effect ($f^2 = 0.003$), with a T-Statistic of 0.726 and a p-value of 0.234, this hypothesis is rejected.
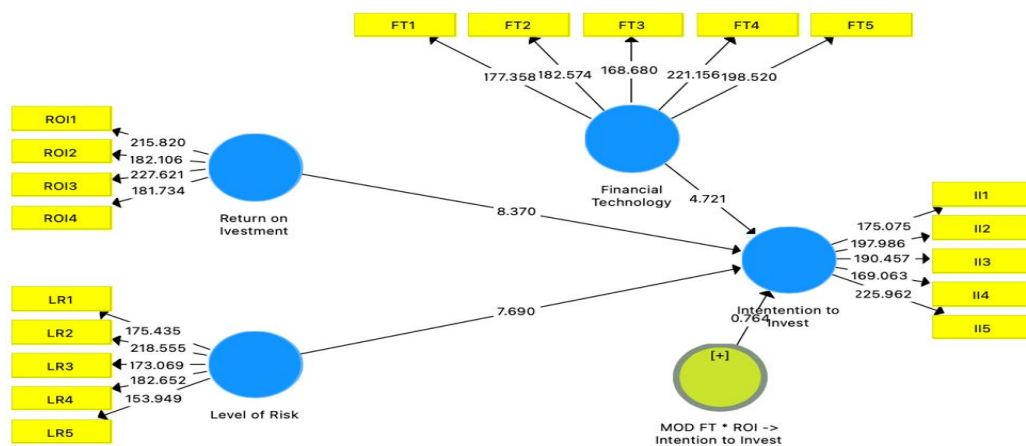
Figure 2. Full Model PLS-SEM

DISCUSSION

The effect of Perceived Risk towards Intention to Invest

The results of the second hypothesis test (H1) in this study indicate that Perceived Risk has a negative effect on Intention to Invest, with a significant result. This finding provides strong evidence supporting the hypothesis that the higher the perceived risk an individual experiences, the lower their intention to invest. Previous studies by Putri & Hamidi (2019) and Shobaik & Elshaer (2023) have shown that perceived risk factors, whether market-related, liquidity-related, or even tied to economic uncertainty, can influence an individual's investment decisions. This finding is also consistent with broader research, such as that by Aren & Hamamci (2020), which emphasizes that high perceptions of risk can act as a significant barrier to individual participation in investment markets, especially in contexts where the market is unstable or lacks transparency. From the perspective of Prospect Theory, this pattern reflects investors' inherent loss aversion, wherein potential losses weigh more heavily than equivalent gains, thereby suppressing their willingness to engage in risky investment activities. Moreover, risk perceptions serve as a psychological reference point that triggers avoidance behavior, reinforcing the tendency of investors, particularly inexperienced ones, to retreat from investment perceived as uncertain.

In a deeper context, the negative influence of Perceived Risk on investment intention can be understood through several key indicators within this variable, such as inflation risk, interest rate risk, and market risk. For example, the indicator "Not worried that inflation will reduce the purchasing power of investments in the future" shows how respondents assess the potential perceived risk to their purchasing power in the future. This indicator is highly relevant in Indonesia, considering the frequent fluctuations in inflation rates. Additionally, the perception of risk regarding market uncertainty, such as "Not worried that changes in interest rates could affect the value of my investments," also reflects the significant influence of Perceived Risk on investment

decisions. According to Ajzen (1991) in his Theory of Planned Behavior, subjective factors such as social norms and individuals' prior experiences with investment losses can exacerbate the perception of high risk. In this case, Indonesians who prefer traditional investment instruments like savings accounts or gold tend to avoid investments considered riskier, such as stocks or cryptocurrencies, even though the potential perceived returns offered may be higher. This shows that although the potential for high perceived returns may exist, the fear of perceived risk can prevent investors from participating in more volatile instruments.

Based on the f-square value, the relationship between Perceived Risk and Intention to Invest shows a strong influence, though slightly weaker compared to the relationship between Perceived Return and Intention to Invest. This difference indicates that while perceived risk significantly impacts investment intention, the perceived return or investment gains remain more dominant in shaping investment decisions. This suggests that although perceived risk plays an important role in investment decisions, factors such as the potential for higher perceived returns and clear profits can reduce the negative impact of those risks. In other words, while investors may have concerns about the perceived risks they face, they are still likely to invest if they believe the potential perceived returns outweigh the existing perceived risks. This finding reveals an interesting dynamic in investment behavior, where individual decisions are more influenced by expected profits than by fear of perceived risk. Overall, the results of this study emphasize that while perceived risk factors have a negative impact on investment intention, their influence is not as strong as that of Perceived Return in shaping investment interest. This phenomenon suggests that investors, particularly millennials, are more inclined to invest when they feel confident about the potential profits they will gain, despite considering the associated perceived risks.

The effect of Perceived Return on Intention to Invest

The results of the first hypothesis test (H2) in this study indicate that Perceived Return has a significant positive effect on Intention to Invest. This finding supports the theory that the higher the expected perceived returns, the greater the individual's intention to invest. This study aligns with previous findings by Bustami & Dewi (2021), who found that higher perceived returns encourage greater investment interest, particularly among the millennial generation. It also supports the study by Merkoulva & Veld (2022), which demonstrated that individuals with an optimistic outlook on perceived return tend to show a higher likelihood of participating in investments, indicating a positive relationship between perceived return and Intention to Invest. This finding is also consistent with other studies, such as the one reported by Populix (2022), which revealed that the majority of investors choose investment instruments based on the potential perceived return in the future. From the standpoint of Prospect Theory, this tendency reflects

investors' heightened sensitivity to potential gains, as individuals often anchor their expectations to prospective profit outcomes that shape their positive valuation of investment choices. The anticipation of gains shifts the investor's reference point into a gain domain, thereby strengthening their motivation to pursue investment opportunities perceived as financially rewarding.

More deeply, the positive influence of perceived return on investment intention is not only driven by higher perceived returns but is also influenced by the investor's understanding of the various elements of perceived return itself. Elements such as capital gain (profit from asset price increases) and yield (routine income such as dividends) prove to be the most representative indicators in driving investment interest. In the context of Indonesia, where investors are more focused on investment instruments such as stocks and mutual funds, the perceived returns derived from capital gains and dividends often become the primary consideration in investment decision-making. Furthermore, in a dynamic and sometimes volatile market like Indonesia, understanding the perceived risk–perceived return trade-off becomes increasingly important. The millennial generation, which is the focus of this study, is generally more interested in investment opportunities that offer clear and measurable perceived returns, as reflected in the findings of Bustami & Dewi (2021), where young investors tend to prefer investment instruments with clear and potential perceived returns. Therefore, perceived return not only statistically influences investment intention but also psychologically, providing an insight into how future profit expectations can alter investment behavior among millennials.

Additionally, the analysis of the f-square value shows that the relationship between perceived return and Intention to Invest is stronger compared to the relationship between perceived risk and Intention to Invest. In this context, these findings suggest that perceived return is a more dominant factor in influencing investment intention compared to the perceived risk by investors. This phenomenon can be understood by considering that while perceived risk is often a limiting factor in investment decisions, high perceived return offers a stronger incentive for investors to overlook potential losses and focus more on the profit opportunities that can be achieved. This also reinforces the understanding that in the world of investing, particularly among millennials, the attraction of greater potential perceived returns often outweighs concerns about perceived risk. In other words, the influence of perceived return on investment intention in Indonesia has a greater impact than the impact of perceived risk. Overall, these results show that in the context of investing in Indonesia, particularly among the millennial generation, perceived return is the most significant factor in shaping investment intention. The positive influence of perceived return can be leveraged by stakeholders in the financial sector and capital markets to develop more transparent and appealing investment instruments for young investors. This understanding

provides a solid foundation for efforts to improve financial literacy and encourage wider participation in Indonesia's capital markets.

The Moderating Effect of Financial Technology

The results of the third hypothesis test (H3) indicate that Financial Technology (fintech) does not moderate the relationship between Perceived Risk and Intention to Invest, meaning that this hypothesis is rejected. This finding suggests that although fintech is often considered to enhance the accessibility of information and transparency in the financial market, its role in moderating the perceived risk–investment intention relationship in Indonesia is not as strong as expected. Previous research by Arhan et al. (2024) and Putri & Triputrajaya (2024) indeed shows that fintech has a positive impact on increasing investment interest, but this study demonstrates that its impact is not significant enough to directly moderate the effect of Perceived Risk. This finding is also consistent with results presented by Fadika & Indra (2024), who noted that while fintech can increase market participation, its contribution to moderating other factors has not proven strong in the context of the Indonesian market. Viewed through the lens of Prospect Theory, this outcome suggests that technological facilitation alone is insufficient to shift investors' reference points or attenuate their inherent aversion to potential losses. Even with improved access to information, investors may continue to overweight the possibility of unfavorable outcomes, thereby limiting fintech's capacity to alter the psychological mechanisms risk-averse behavior.

The failure of Financial Technology to act as a moderator in the relationship between Perceived Risk and Intention to Invest can be attributed to the complexity of fintech usage by investors in Indonesia, particularly among millennials. Although fintech offers ease in accessing information, transactions, and investment portfolios, elements such as knowledge of fintech and trust in fintech are not enough to alter risk perceptions or attenuate the salience of Perceived Risk in shaping intention. For example, even though indicators like Motivation to Use Fintech and Trust in Fintech Data received high reliability scores in the analysis, many millennial investors still anchor their decisions on Perceived Risk rather than the convenience offered by fintech applications. This phenomenon can be explained by the technology adoption gap in the Indonesian market, where despite the increasing penetration of smartphones and digital investment apps, reliance on offline knowledge or personal recommendations remains strong. Therefore, while fintech holds potential, it has not yet proven to be a factor that meaningfully weakens the negative relationship between Perceived Risk and investment intention.

Furthermore, the f-square value for Financial Technology in moderating the Perceived Risk– Intention to Invest link indicates an extremely weak influence, almost negligible. This shows that, while fintech plays a role in providing information and ease of access, it is not enough to moderate

the relationship between Perceived Risk and investment intention. In this context, the significant decline in this hypothesis suggests that although fintech can expand market access and provide convenience, it cannot address investors' deep concerns about Perceived Risk or replace more fundamental drivers of intention. The lack of a moderating effect shows that investors, while able to access market data more easily, are still more influenced by their Perceived Risk assessments than by the facilitation offered by fintech platforms themselves.

The impact of this hypothesis test result is that the relationship between Perceived Risk and investment intention remains largely intact, while fintech is not strong enough to alter this dynamic. In other words, although fintech plays an important role in providing more accessible and transparent platforms, it does not replace the main factor constraining investment decisions, namely the persistence of Perceived Risk. This finding is important for the fintech industry, as it shows that to play a more significant role in increasing investment interest, fintech must focus on improving trust, financial education, and a better framing of Perceived Risk in investment decisions. In conclusion, these results indicate that while fintech plays an important role in improving access and transparency, its moderating effect on the Perceived Risk–investment intention relationship remains limited in the context of the developing Indonesian market.

CONCLUSION

Based on the research findings, it can be concluded that the perceived risk has a negative effect on Intention to Invest (H1), indicating that the higher the perceived risk, the lower the intention to invest. Furthermore, Perceived Return has a significant positive effect on Intention to Invest (H2), meaning that the higher the perception of expected investment return, the greater the intention to invest. However, Financial Technology (Fintech) is not able to moderate the relationship between perceived risk and Intention to Invest (H3), which means fintech is not strong enough to alter investors' perceptions of the relationship between risk and investment intention.

The findings in this study reinforce several existing theories, particularly Prospect Theory, which explains how cognitive factors such as loss aversion and the framing effect influence investment decisions, especially in the context of perceived risk and perceived return. This research clarifies that although fintech facilitates access to information, return and risk remain the dominant factors influencing investment decisions, reinforcing the theory that financial gains motivate investment more than the convenience offered by technology. A suggestion for future theory development is to explore how fintech can address uncertainties related to risk and whether there are long-term effects of fintech use on investors' perceptions of risk. The findings of this

study provide recommendations for both the government and market players in investments. The government needs to strengthen financial literacy to reduce excessive risk perceptions, especially among the younger generation, to encourage them to be more open to investment opportunities with higher risks. As a concrete step, the government could implement educational programs focused on how to assess perceived return and investment risks perception wisely. For investment market players, especially fintech companies, they need to improve data transparency and provide better education about investment products, which will help potential investors better understand risks, reducing their dependence solely on technological convenience. Fintech service providers also need to focus on building user trust by offering deeper risk analysis and insights into the relationship between risk and return.

This study has several limitations that should be considered. First, the moderate R-squared value (0.499) indicates that there are additional factors beyond the model that influence Intention to Invest, which were not captured in this study. Future research could explore other external factors, such as macroeconomic conditions or individual socio-economic characteristics, that may have a more significant impact on investment decisions. Expanding the model to incorporate these factors may improve the explanatory power of the research. Second, the sampling method, which is limited to employees of PT. Brantas Abipraya, represents a homogeneous group and affects the generalizability of the findings. Future research could use a more diverse sample drawn from various sectors or regions, thereby enabling the results to be more representative of the broader population. Including respondents from different age groups, industries, and investment experience levels would provide a more comprehensive understanding of investment behavior. Third, the cross-sectional design of this study only captures data at one point in time and does not account for changes in investment behavior or perceptions over time. Future research could adopt a longitudinal design to observe how individuals' perceptions of risk and return evolve and influence investment behavior in the long term. This approach would provide insights into how factors like return and risk are perceived differently in varying market conditions and how fintech may influence these perceptions over time. By addressing these limitations, future studies could further refine our understanding of the complex factors that influence investment behavior, particularly in the context of fintech and market dynamics.

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