

The Influence of Financial Technology, Financial Literacy and Risk Perception on Stock Investment Decisions Through Financial Behavior as a Moderating Variable on Generation Z in Pontianak City

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Abstract

Investment is an activity of investing funds in an asset with the aim of obtaining future returns, which are differentiated based on instruments, time periods, and risk levels. Currently, people's investment interest, especially Generation Z, is increasing along with technological advances and easy access to information through digital platforms based on financial technology (fintech). However, this convenience is not always accompanied by an understanding of risk, so financial literacy becomes important. Risk perception is also an important factor in making investment decisions, especially with the threat of digital security. This study aims to analyze the influence of fintech, financial literacy, and risk perception on investment decisions with financial behavior as a moderating variable. This study uses a quantitative approach with an associative research type. Data were collected through questionnaires distributed to 150 Generation Z respondents in Pontianak City who are actively investing, with purposive sampling techniques and analysis using a structural model (SEM-PLS). The results show that all indicators are valid and reliable. R-Square and Q-Square show that the model has good clarity and predictive relevance, and SRMR shows adequate model suitability. The results of the hypothesis testing show that fintech and financial literacy have a positive but insignificant effect on investment decisions, while risk perception and financial behavior have a positive and significant effect. Financial behavior is also proven to significantly moderate the relationship between fintech and risk perception on investment decisions.

Keywords: Investment, Financial Technology, Financial Literacy, Risk Perception, Financial Behavior

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Introduction

Technological advances have changed various aspects of life, including the financial sector (Khairi et al., 2025). Financial technology (fintech) is an innovation that makes it easier for people to access financial services, including investment. Anggraeni & Putra (2025) said that, In Indonesia the development of fintech allows easier and more transparent access to financial products, although its use in investment is still influenced by financial literacy and individual risk perception. Generation Z, who are familiar with digital technology, has a unique approach to financial decision-making. In Pontianak City, fintech has become a popular choice for this generation to start investing.

Investment can be interpreted as investing capital or funds in an asset with the hope of obtaining profits or returns in the future (Destina, 2022). Investments are distinguished based on instruments, time periods, and risks. Based on instruments, there are financial investments such

as stocks and bonds, as well as non-financial investments such as property and gold. In terms of time, investments can be short-term, such as deposits, or long-term, such as stocks. Meanwhile, based on risk, investments are categorized into low, medium, and high according to their potential profits and losses. Investment aims to increase the value of the funds invested, thereby helping to achieve economic stability and growth (Hidayati, 2017; Makohon (2020).

Currently, public awareness of the importance of investment is increasing. According to Upadana & Herawati (2020) and Pujihati et al. (2023), this is influenced by various factors, including technological advances, which have made it easier for people to access financial information and various investment instruments. The younger generation, especially Generation Z, is starting to show significant interest in investment, driven by the opportunities offered by digital platforms such as financial technology-based investment applications.

However, the convenience offered by fintech does not guarantee that Generation Z fully understands the risks and benefits of the investments made. This is where financial literacy is important. Financial literacy is a person's ability to understand and manage finances effectively to make the right financial decisions and achieve economic well-being (Lone & Bhat, 2022). This includes an understanding of budgeting, savings, investment, debt, and retirement planning. Previous research has shown that low levels of financial literacy can lead to mistakes in financial decision-making, including investment.

Investment decisions are inseparable from risk, one of which is the risk of default, which of course affects the assessment or perception of the public, especially investors or funders, in placing their funds in a company. In addition to the risk of default, there are also security risks that investors must face (Madan & Unal, 1998). In addition, online crimes such as wiretapping and data breaches are also a real threat, especially for investors or lenders who invest their funds. This insecurity makes many people hesitate to use fintech services, even though many companies have implemented strict security systems (Rijaldi & Dasman, 2024)

Risk perception according to Rauthmann (2015) is a person's assessment of a risky situation, where the assessment depends on the psychological characteristics and circumstances of the person. In addition, risk perception can also be interpreted as a factor that influences investment decision making, this is because investors who use their risk perception properly and considerately regarding the potential risks that will be experienced will certainly have a good impact on the investment they will make. A person tends to define a risky situation if they experience a loss due to a bad decision, especially if the loss has an impact on the financial situation of the person concerned (Aren & Nayman, 2020).

According to Almansour et al. (2023), Investor risk perception is an important factor in investment decision making. Every decision is based on a thorough analysis of potential rewards and risks. Risks can arise at any time, both in the short and long term, large and small. Therefore, investors need to consider future risks. The right risk perception helps investors to be more careful in assessing investments, because their main goal is to gain long-term profits, especially for shareholders (Bintara, 2018).

Pontianak, the capital city of West Kalimantan Province on the island of Borneo, is known as the Equator City because of its location on the equator. As the center of economic growth in West Kalimantan, Pontianak has great potential for this research. The spread of fintech and easy access to financial information in this region offer opportunities to understand the investment decision patterns of generation Z. This study aims to identify the factors that influence the investment decisions of generation Z in Pontianak, with the hope of providing

academic and practical contributions, especially in supporting financial literacy and the development of fintech services that are in accordance with the needs of the younger generation.

Investment decisions are the process of selecting and placing funds in various financial assets or instruments with the aim of gaining profits in the future. This decision involves risk analysis, potential returns, and external factors such as market conditions, the economy, and financial policies. Investors consider various options, such as stocks, bonds, mutual funds, or other assets, according to their financial goals and risk tolerance. According to Handayani & Rahayu (2019), investment decisions are decisions to place capital in certain instruments with the aim of gaining profits in the future.

Align with research from Alstadsæter et al. (2026), shares are a sign of ownership of a person or entity in a company, which gives rights to part of the assets and income according to the number of shares owned. Shares are issued in the form of securities and traded on the capital market, making them one of the popular financial instruments, according to the Indonesia Stock Exchange (IDX). For companies, issuing shares is one way to obtain funding, while for investors, shares offer the potential for attractive profits. However, in making investment decisions, an overconfidence attitude can make investors act recklessly, even though their abilities are not yet adequate. This risks affecting the psychology of investors and causing losses in investment.

Financial behavior is the way individuals or groups manage and make decisions about money, such as saving, investing, shopping, and using credit. Social factors, technology, financial education, and culture also influence this behavior. In Indonesia, consumer behavior is often associated with low awareness of saving and investing. In addition, financial behavior plays a role in connecting fintech, financial literacy, and risk perception to investment decisions. In Generation Z, technology can strengthen or weaken the impact of financial literacy, fintech, and risk perception in determining their financial choices.

The phenomenon in the study is based on the author's point of view that there is Fear of Missing Out (FOMO) behavior, namely anxiety or fear of missing opportunities or experiences that are considered important, especially those influenced by social media. FOMO often triggers excessive consumer behavior, such as buying products or following trends to avoid feeling left behind. Among Generation Z, the influence of social media is very strong, driving their interest in investing in stocks. Information from influencers, financial experts, or other investor experiences is easily accessible, but Generation Z is often influenced by momentary trends. In fact, successful investment requires a mature strategy, patience, and an understanding of risk.

Previous research shows that Financial Technology, Financial Literacy, and Risk Perception have a positive and significant influence on investment decisions. In contrast to the research of Saputri & Erdi (2023) which shows that financial literacy has a significant influence on investment decisions, with financial behavior as a moderating variable that strengthens the relationship. Based on the background, the author wants to examine the factors that influence investment decisions of Generation Z in Pontianak with the title "The Influence of Financial Technology, Financial Literacy and Risk Perception on Investment Decisions Through Financial Behavior as a Moderating Variable in Generation Z in Pontianak".

Methods

The method used in this study is quantitative research. According to Sugiyono in Murjani (2022) "Quantitative research is a research method based on the philosophy of positivism, used

to research certain populations or samples, and data collection generally uses measurable research instruments, and is analyzed statistically to test predetermined hypotheses". The type of research used in this study is an associative approach. According to Sugiyono in Nugroho (2018), associative research is a formulation of a research problem that is intended to ask about the relationship between two or more variables. This study aims to analyze the direct and indirect effects of independent variables, namely financial technology, financial literacy and risk perception with financial behavior as a moderating variable. Data collection techniques are the most important step in research because the main purpose of research is to obtain data. Data collection can be done in various situations, methods, and sources. In this study, data was collected through two types of sources, namely primary sources and secondary sources. Data obtained directly from data collectors, namely through questionnaires distributed to respondents. A questionnaire is a data collection technique carried out by providing a set of written questions or statements to respondents to answer, which in this case were distributed to generation Z in Pontianak City. Secondary sources, are data that are not directly given to data collectors, and are obtained through documentation techniques, such as financial literacy index data from the OJK, population data for Pontianak City in 2023 from the Pontianak City BPS, and stock investor data in West Kalimantan in 2019–2024 from the West Kalimantan representative office of the Indonesia Stock Exchange. The population definition, namely a generalization area consisting of subjects or objects with certain characteristics to be studied and conclusions drawn, which in this case is Generation Z in Pontianak City with a total of 219,743 people. The sample in this study, is part of the number and characteristics of the population, with a determination technique using purposive sampling, namely the selection of samples based on certain considerations namely Generation Z in Pontianak City who actively invest in the capital market. The number of samples was determined using the Slovin formula, with an effective population of 164,683 people, so that a minimum sample of 99 people was obtained, but in this study it was determined as many as 150 respondents.

Data Analysis Techniques

In this study, data analysis was carried out using an inferential statistical approach using the Structural Equation Modeling (SEM) method. SEM is effective in handling complex models and limited sample sizes efficiently and does not rely on certain assumptions about the data. Morin et al. (2020) explained that SEM is a combination of exploratory factor analysis and structural path analysis that allows simultaneous evaluation of measurement and structural models. SEM-PLS consists of two sub-models: outer model and inner model. The outer model describes the relationship between indicators and latent variables, with convergent and discriminant validity testing using the MTMM approach and confirmatory factor analysis. Convergent validity is assessed through the outer loading value (> 0.7) and Average Variance Extracted (AVE > 0.5), while discriminant validity is tested through cross loading and AVE values. Reliability is tested with Composite Reliability (> 0.70) and Cronbach's Alpha (> 0.50). The inner model explains the relationship between latent variables with measurements through R-Square (with values of 0.75, 0.50, and 0.25 for high, medium, and low predictions), f-square (values of 0.02, 0.15, and 0.35 for small, medium, and large effects), Q-Square ($Q^2 > 0$ indicates predictive relevance), and Goodness of Fit (GoF; a value of 0.1 is small, 0.25 is medium, and 0.38 is large). Hypothesis testing is carried out to evaluate the significance of the influence between variables using parameter coefficient values, t-statistics (> 1.96), and p-values (< 0.05) with the bootstrapping method. The direction of influence (positive or negative) is seen from the original sample value. Direct effect analysis refers to the significant influence of independent variables on investment decisions, with the equation model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2$

+ $\beta_3X_3 + \square$, where Y is the investment decision, and X1, X2, X3 are financial technology, financial literacy, and risk perception, respectively. The direct effect hypothesis includes the influence of each variable on investment decisions, as well as the influence of financial behavior (Z) as an additional variable. For indirect effects, financial behavior is tested as a moderator variable in the relationship between X1, X2, and X3 on Y, with the model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4Z + \beta_5X_1.Z + \beta_6X_2.Z + \beta_7X_3.Z + \square$. The indirect effect hypothesis assesses the significance of Z's moderation in the relationship between the three independent variables and Y. Finally, the total effect analysis is carried out by summing the direct and indirect effects, which provides a comprehensive picture of the influence of one variable on another variable (Carrión et al., 2017).

Result and Discussion

Evaluation of Measurement Model or Outer Model

Convergent Validity

The convergent validity test is conducted by looking at the loading factor value of each indicator in a construct. The higher the loading value, the more it shows that the indicators point to the same thing or the same concept. This value illustrates how strong the relationship is between the indicator and the variable to be measured. In general, a good loading factor value is above 0.7. The results of the convergent validity test of all variables in this study can be seen in Table 1 below:

Table 1. Convergent Validity Test Results

Variable	Indicator	Loading Factor	Remarks
Financial Technology (X1)	X1.1	0.753	Valid
	X1.2	0.843	
	X1.3	0.840	
	X1.4	0.841	
	X1.5	0.819	
	X1.6	0.814	
Financial Literacy (X2)	X2.1	0.796	Valid
	X2.2	0.852	
	X2.3	0.826	
	X2.4	0.831	
	X2.5	0.764	
	X2.6	0.853	
	X2.7	0.891	
	X2.8	0.739	
	X2.9	0.813	
	X2.10	0.722	
	X2.11	0.842	
	X2.12	0.826	
Risk Perception (X3)	X3.1	0.759	Valid
	X3.2	0.723	
	X3.3	0.776	
	X3.4	0.772	
	X3.5	0.794	

	X3.6	0.768	
	X3.7	0.788	
	X3.8	0.815	
	X3.9	0.779	
	X3.10	0.781	
	X3.11	0.816	
	X3.12	0.735	
	X3.13	0.803	
	X3.14	0.809	
	X3.15	0.791	
Financial Behavior (Z)	Z1.1	0.757	Valid
	Z1.2	0.771	
	Z1.3	0.816	
	Z1.4	0.787	
	Z1.5	0.808	
	Z1.6	0.773	
Investment Decision (Y)	Y1.1	0.852	Valid
	Y1.2	0.816	
	Y1.3	0.835	
	Y1.4	0.796	
	Y1.5	0.793	
	Y1.6	0.798	
	Y1.7	0.827	
	Y1.8	0.846	
	Y1.9	0.773	
	Y1.10	0.802	
	Y1.11	0.867	
	Y1.12	0.836	

Source: Processed Data, 2025

Based on the results of the convergent validity test shown in the table above, it can be seen that the results of the convergent validity test show that all indicators in each variable, namely Financial Technology, Financial Literacy, Risk Perception, Financial Behavior and Investment Decisions have a loading factor value above 0.7. This value indicates that each indicator is able to represent its construct or latent variable well. Thus, all indicators are declared valid as a measure of each variable. The next step is to test the Discriminant Validity.

Discriminant Validity

The discriminant validity test was conducted using the Fornell-Larcker criteria to assess whether each construct can be clearly distinguished from other constructs. The value of the Fornell-Larcker criteria on the intended construct must be greater than the value of the latent construct. If this value is met, it can be concluded that the construct has adequate discriminant validity, because the indicators on the construct are stronger in measuring its own variables compared to other variables. The results of the discriminant validity test in this study can be seen in Table 2 below:

Table 2. Results of the Discriminant Validity Test

Variable	Financial Technology	Investment Decision	Financial Literacy	Financial Behavior	Risk Perception
Financial Technology	0.819				
Investment Decision	0.557	0.821			
Financial Literacy	0.645	0.679	0.814		
Financial Behavior	0.664	0.739	0.781	0.786	
Risk Perception	0.548	0.745	0.704	0.763	0.781

Source: Processed Data, 2025

Based on the results of the discriminant validity test shown in the table above, it can be seen that each construct has a higher Fornell-Larcker criterion value compared to its correlation value against other constructs. This shows that these indicators are stronger in measuring their own constructs than other constructs. Thus, it can be concluded that each construct has good discriminant validity, because it is able to clearly distinguish itself from other constructs in the model. Discriminant validity is declared fulfilled if the Fornell-Larcker value is more than 0.70. The next method to see the validity of a construct can be done by looking at the Average Variance Extracted (AVE). A construct is said to be valid if it has an AVE value > 0.5. The AVE value in this study can be seen in Table 3 below:

Table 3. AVE Test Results

Construct	Ave
Financial Technology (X1)	0,670
Financial Literacy (X2)	0,663
Risk Perception (X3)	0,610
Financial Behavior (Z)	0,617
Investment Decision (Y)	0,673

Source: Processed Data, 2025

Based on the results of the Average Variance Extracted (AVE) test in the Table above, it can be seen that all variables in this study show an AVE value of more than 0.5. This indicates that all constructs have met the criteria for discriminant validity. Therefore, it can be concluded that the indicators used in this study are valid for measuring the variables to be studied.

Reliability Test

The composite reliability test in the measurement model aims to assess the internal consistency of a construct in measuring its variables. The Composite Reliability value is considered good if it has a value of 0.7, which indicates a high level of construct reliability. In addition, to strengthen the results of the reliability test, the Cronbach's Alpha value is also used with an expected minimum limit of 0.6. The results of the reliability in this study can be seen in Table 4 below:

Table 4. Results of Cronbach's Alpha & Composite Reliability Tests

Variables	Cronbach's Alpha	Compostite Reliability
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Financial Technology (X1)	0,901	0,924
Financial Literacy (X2)	0,953	0,959
Risk Perception (X3)	0,954	0,958
Financial Behavior (Z)	0,876	0,906
Investment Decision (Y)	0,956	0,961

Source: Processed Data, 2025

Based on the results of the reliability test in the table above, it can be seen that all constructs in the tested model have met the reliability standards, this is indicated by the Composite Reliability value of more than 0.7 and the Cronbach's Alpha value of more than 0.6. Therefore, it can be concluded that all measurement items in each variable have a good level of reliability and are suitable for use in this study. The results of the Outer Model test can be seen in the figure below.

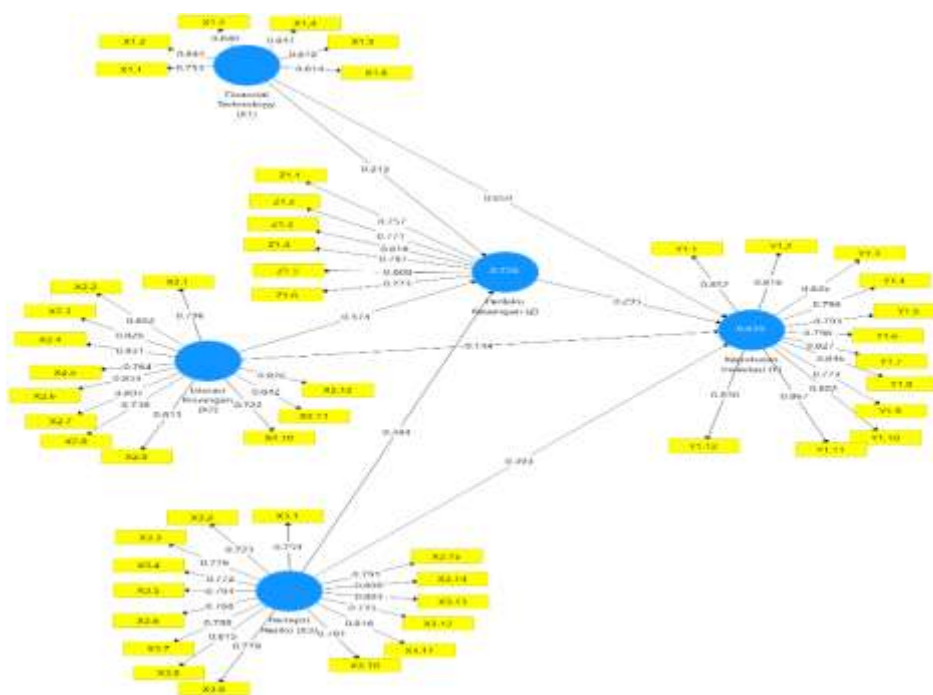


Figure 1. Outer Model Test Results

Source: SmartPLS Output, 2025

Structural Model Evaluation or Inner Model

Inner model testing is conducted to ensure that the structural model that has been built has accurate results. Inner model testing in structural equation modeling analysis with the Partial Least Square approach can be measured by:

Coefficient of Determination (R-Square)

In SEM-PLS analysis, the R-square (R^2) value is used to measure how much the independent variable is able to explain the variance of the dependent variable. A high R^2 value indicates that the model has good predictive ability. The Coefficient of Determination (R-Square) is a test to see how much the endogenous construct is explained through the exogenous construct. The R-Square value from the calculation results can be seen in table 5 below:

Table 5. R-Square Test Results

Endogenous Variables	R-Square	R-Square Adjusted
Investment Decision (Y)	0,635	0,620
Financial Behavior (Z)	0,726	0,718

Source: Processed Data, 2025

Based on the results of the R-Square test in the Table above, the results can be interpreted as follows: (1) The Adjusted R-Square value for the Investment Decision variable (Y) is 0.620, which means that the Investment Decision variable (Y) is simultaneously influenced by the Financial Technology variable (X1), Financial Literacy (X2), Risk Perception (X3) and Financial Behavior (Z) by 62.0% and the remaining 38.0% is influenced by other variables outside this research model. And based on the R-Square value, it has a value of 0.635 so it can be concluded that the influence of the exogenous constructs of Financial Technology (X1), Financial Literacy (X2), Risk Perception (X3) and Financial Behavior (Z) on Investment Decisions (Y) is Moderate; (2) The Adjusted R-Square value on the Financial Behavior variable (Z) is 0.718, which means that the Financial Behavior variable (Z) is influenced simultaneously by the Financial Technology variable (X1), Financial Literacy (X2) and Risk Perception (X3) by 71.8% and the remaining 28.2% is influenced by other variables outside this study. And based on the R-Square value, it has a value of 0.726 so it can be concluded that the influence of the Financial Technology construct (X1), Financial Literacy (X2) and Risk Perception (X3) on Financial Behavior (Z) is Strong.

F-Square Test

In SEM-PLS analysis, the F-Square test is used to measure how much contribution or influence an independent construct has on the dependent construct in the structural model built. The F-Square value from the calculation results can be seen in table 5 below:

Table 5. F-Square Test Results

Model	F-Square
Financial Technology (X1) → Investment Decision (Y)	0,008
Financial Literacy (X2) → Investment Decision (Y)	0,046
Risk Perception (X3) → Investment Decision (Y)	0,066
Financial Behavior (Z) > Investment Decision (Y)	0,244

Source: Processed Data, 2025

Based on the results of the F-Square test in the Table above, the results can be interpreted as follows: (1) The F-Square value in the Financial Technology model (X1) on Investment Decisions (Y) has a value of 0.008 which is classified as low, this is because the value is in the interval of 0.02; (2) The F-Square value in the Financial Literacy model (X2) on Investment Decisions (Y) has a value of 0.046 which is classified as low, this is because the value is in the interval above 0.02 but below 0.15; (3) The F-Square value in the Risk Perception model (X3) on Investment Decisions (Y) has a value of 0.066 which is classified as low, this is because the value is in the interval above 0.02 but below 0.15; (4) The F-Square value in the Financial Behavior model (Z) on Investment Decisions (Y) has a value of 0.244 which is classified as moderate, this is because the value is in the interval above 0.15 but below 0.35.

Q-Square Test

The Q-Square test aims to assess how well the model can predict the dependent variable. This test is conducted using the Blindfolding technique and aims to see to what extent the model is able to estimate the values of the endogenous construct accurately. The Q-Square value from the calculation results can be seen in table 6 below:

Table 6. Q-Square Test Results

Model	Q-Square
Investment Decision (Y)	0,409
Financial Behavior (Z)	0,400

Source: Processed Data, 2025

Based on the results of the Q-Square test in the Table above, the results can be interpreted as follows: (1) The Q-Square value of the Investment Decision variable has a value of 0.409 which indicates that the structural model of Financial Technology (X1), Financial Literacy (X2) and Risk Perception (X3) towards Investment Decisions (Y) has good relevance because the value is above 0.2; (2) The Q-Square value of the Financial Behavior variable has a value of 0.400 which indicates that the structural model of Financial Technology (X1), Financial Literacy (X2) and Risk Perception (X3) towards Financial Behavior (Z) has good relevance because the value is above 0.2.

Goodness of Fit (GoF)

The Goodness of Fit (GoF) test in the SEM-PLS approach functions to assess the extent to which the overall model is appropriate, both in terms of the relationship between constructs (inner model) and in terms of measurement indicators (outer model). In SEM-PLS, the Goodness of Fit assessment can be done using the SRMR (Standardized Root Mean Square Residual) indicator, which describes the average difference between the covariance generated by the model and the actual covariance observed. A lower SRMR value indicates that the model has a better overall level of suitability. The Goodness of Fit value from the calculation results can be seen in Table 7 below:

Table 7. Goodness of Fit Test Results

SRMR	Estimation Model
	0,070

Source: Processed Data, 2025

Based on the results of the Goodness of Fit test shown in the Table above, it can be seen that the test results show that the SRMR value is 0.070 which is below 0.08. This shows that the model has a very good fit between the estimated model structure.

Hypothesis Testing

Direct Effect

Direct effect is a test to see the direct influence of a construct or exogenous latent variable on the endogenous latent variable. The Direct Effect test can be seen based on the results of the bootstrapping output path coefficient. The Direct Effect test in this study can be seen in table 8 below:

Table 8. Direct Effect Test Results

Hypothesis	Relationship Between Variables	Original Sample Estimate	T Statistic	P Value	Remarks
H1	Financial Technology → Investment Decision	-0.132	1.151	0.250	Not Significant
H2	Financial Literacy → Investment Decision	0.209	1.677	0.094	Not Significant
H3	Risk Perception → Investment Decision	0.329	2.248	0.025	Significant
H4	Financial Behavior → Investment Decision	0.477	2.916	0.004	Significant

Source: Processed Data, 2025

Based on the results of the Direct Effect test shown in the Table above, the Direct Effect results can be interpreted as follows: (1) Financial Technology (X1) has a direct effect on Investment Decisions (Y) with a T Statistic of 1.151, a significance level < 1.96 , and a P.Value of 0.250, a significance level > 0.05 . So it can be said that the direct effect of Financial Technology on Investment Decisions is positive but not significant; (2) Financial Literacy (X2) has a direct effect on Investment Decisions (Y) with a T Statistic of 1.677, a significance level < 1.96 , and a P.Value of 0.094, a significance level < 0.05 . So it can be said that the direct effect of Financial Literacy on Investment Decisions is positive but not significant; (3) Risk Perception (X3) has a direct effect on Investment Decisions (Y) with a T Statistic of 2.248, a significance level > 1.96 , and a P.Value of 0.025, a significance level < 0.05 . So it can be said that the direct effect of Risk Perception on Investment Decisions is positive and significant; (4) Financial Behavior (Z) has a direct effect on Investment Decisions (Y) with a T Statistic of 2.916, a significance level > 1.96 , and a P.Value of 0.004, a significance level < 0.05 . So it can be said that the direct effect of Financial Behavior on Investment Decisions is positive and significant.

Indirect Effect

Indirect effect is a test to see the indirect influence of a construct or exogenous latent variable on an endogenous latent variable through a mediating variable. The Indirect Effect test can be seen based on the results of the specific indirect effects of the bootstrapping output. The Indirect Effect test in this study can be seen in Table 9 below:

Table 9. Results of the Indirect Effect Test

Hypothesis	Relationship Between Variables	Original Sample Estimate	T Statistic	P Value	Remarks
H5	Financial Technology → Financial Behavior → Investment Decision	0.158	1.972	0.049	Significant
H6	Financial Literacy → Financial Behavior → Investment Decision	0.069	0.487	0.397	Not Significant
H7	Risk Perception → Financial Behavior → Investment Decision	0.206	2.254	0.015	Significant

Source: Processed Data, 2025

Based on the results of the Indirect Effect test shown in the Table above, the results of the Indirect Effect can be interpreted as follows: (1) Financial Technology (X1) has an indirect effect on Investment Decisions (Y) which is moderated by Financial Behavior (Z) with a T Statistic of 1.972, a significance level of > 1.96 , and a P.Value of 0.049, a significance level of < 0.05 . So it can be said that the indirect effect of Financial Technology on Investment Decisions through Financial Behavior is positive and significant; (2) Financial Literacy (X2) has an indirect effect on Investment Decisions (Y) which is moderated by Financial Behavior (Z) with a T Statistic of 0.487, a significance level of < 1.96 , and a P.Value of 0.397, a significance level of > 0.05 . So it can be said that the indirect effect of Financial Literacy on Investment Decisions through Financial Behavior is positive but not significant; (3) Risk Perception (X3) has an indirect effect on Investment Decisions (Y) which is moderated by Financial Behavior (Z) with a T Statistic of 2.254, a significance level > 1.96 , and a P.Value of 0.015, a significance level < 0.05 . So it can be said that the indirect effect of Risk Perception on Investment Decisions through Financial Behavior is positive and significant.

Total Effect Hypothesis

Based on the results of direct effect and indirect effect testing, the following results can be explained: (1) The results of the direct effect test of Financial Technology (X1) on Investment Decisions (Y) with a T Statistic of 1.151, a significance level of < 1.96 , and a P.Value of 0.250, a significance level of > 0.05 . While the results of the indirect test have a T Statistic of 1.972, a significance level of > 1.96 , and a P.Value of 0.049, a significance level of < 0.05 . So it can be said that the direct effect of Financial Technology on Investment Decisions is positive but not significant. While indirect testing through the moderating variable, namely Financial Behavior (Z), Financial Technology (X1) has a positive and significant effect on Investment Decisions (Y); (2) The results of the Financial Literacy (X2) test directly (direct effect) on Investment Decisions (Y) with a T Statistic of 1.677, a significance level < 1.96 , and a P.Value of 0.094, a significance level > 0.05 . While the results of the indirect test have a T Statistic of 0.847, a significance level > 1.96 , and a P.Value of 0.397, a significance level < 0.05 .

So it can be said that the direct effect of Financial Literacy on Investment Decisions is positive but not significant. While indirect testing through the moderating variable, namely Financial Behavior (Z), Financial Literacy (X2) has a positive but not significant effect on Investment Decisions (Y); (3) The results of the Risk Perception (X3) test directly (direct effect) on Investment Decisions (Y) with T Statistics of 2.248, significance level > 1.96 , and P.Value of 0.025, significance level < 0.05 . While the results of the indirect test T Statistics of 2.447, significance level > 1.96 , and P.Value of 0.015, significance level < 0.05 . So it can be said that the direct effect of Financial Literacy (X2) on Investment Decisions is positive and significant. And indirect testing through moderating variables, namely Financial Behavior (Z), Financial Technology (X1) has a positive and significant effect on Investment Decisions (Y). The results of the Inner Model Test in this study can be seen in the image below:

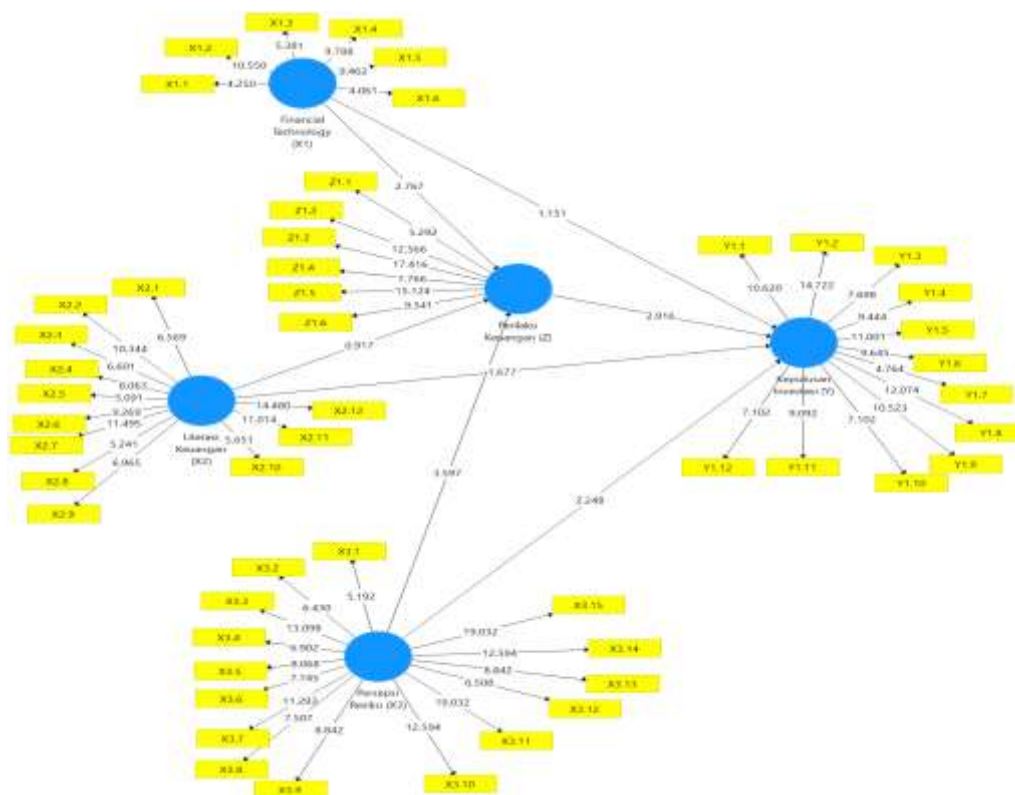


Figure 2. Inner Model Test Results

Source: SmartPLS Output, 2025

Conclusion

The measurement model (outer model) shows that all variable indicators in this study are valid and reliable, based on the results of convergent validity, discriminant validity, AVE, composite reliability, and Cronbach's Alpha tests. The structural model (inner model) shows that: a) the R-Square value for investment decisions is 0.635 and financial behavior is 0.726, indicating that the model has moderate to strong explanatory power; b) the Q-Square test shows a value above 0.2 for both endogenous variables, indicating good predictive relevance; and c) the SRMR value of 0.070 indicates that the overall model has a good fit. Hypothesis testing shows that: (1) Financial Technology has a positive but insignificant effect on investment decisions; (2) Financial Literacy has a positive but insignificant effect on investment decisions; (3) Risk Perception has a positive and significant effect on investment decisions; (4) Financial Behavior has a positive and significant effect on investment decisions; (5) Financial Behavior positively and significantly moderates the effect of Financial Technology on Investment Decisions; (6) Financial Behavior positively but not significantly moderates the influence of Financial Literacy on Investment Decisions; and (7) Financial Behavior positively and significantly moderates the influence of Risk Perception on Investment Decisions.

Suggestion

It is expected to improve financial literacy through training, seminars, or trusted learning sources so that investment decisions are made wiser and more informed. It is better to pay attention to and evaluate personal financial behavior, such as spending management, saving, and investment diversification, because it has been proven to significantly influence investment decisions. Further researchers are advised to review more sources and references that are

relevant to the theory used in this study. In addition, further development of the scope of the study is needed, considering that this study has not been fully able to represent the factors that influence investment decisions. It is also recommended to expand the study by adding various other variables that have the potential to influence investment decisions more comprehensively.

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