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“Beyond age: Decoding the investment DNA of generations Z and Y in Indonesia”

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BEYOND AGE: DECODING THE INVESTMENT DNA OF GENERATIONS Z AND Y IN INDONESIA

Abstract

Investment decisions are a matter of how individuals should allocate funds into investment forms that provide future benefits. This paper investigates the impact of financial literacy, perceptions of risk and returns, family background, income, and financial technology proficiency on investment decisions among Generations Z and Y in Indonesia. This study uses a quantitative approach, using primary data from 240 respondents through purposive sampling. Primary data were collected through a questionnaire survey to collect respondents' perceptions and investment decisions. The Likert scale assesses indicators by eliciting responses to statements and questions. The Structural Equation Model Partial Least Square (SEM-PLS) approach was employed for analysis utilizing WarpPLS 8.0 software. The results show that financial literacy, risk and return perception, income, and fintech proficiency significantly influence investment decisions ($p < 0.05$), while family background does not ($p > 0.05$). In addition, fintech proficiency mediates the effects of financial literacy, risk perception, family background, and income on investment decisions ($p < 0.05$). These findings suggest that improving financial literacy and fintech skills can lead to better investment decisions among young investors. This study highlights the need for targeted financial education programs and innovative fintech solutions to support informed investment choices. Further research is recommended to explore additional factors influencing investment decisions and to develop strategies to improve financial decision-making in this demographic group.

Keywords investment decisions, gen Z, gen Y, SEM-PLS, Indonesia

JEL Classification G11, G40, G53

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INTRODUCTION

Effective personal financial management demands sound investment decisions. These decisions involve selecting appropriate instruments or assets to achieve individual financial goals and are crucial in influencing individual financial well-being. In recent years, the investment landscape has undergone significant changes with the emergence of Generations Z and Y as major players. These young investors bring different characteristics and preferences, shaped by the generation's unique experiences and perspectives, such as being tech-savvy and being more open to other types of investments, such as stocks, bonds, mutual funds, and cryptocurrencies. Generations Z and Y also have a long-term investment horizon oriented towards investments that positively impact society and the environment. In addition, Gen Z and Y prefer learning to invest independently rather than relying on financial planners by utilizing various online resources and investment communities. The development of technology and the importance of sustainable and ethical investment practices are increasingly shaping the way this generation makes investment decisions. Understanding this generation's investment DNA is critical for those in the financial

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industry who want to effectively reach and serve this growing demographic by designing more appropriate and attractive investment products and services, increasing engagement, and building long-term relationships with Generation Z and Y investors. Beyond Age is dedicated to uncovering Generation Z and Y's investment patterns and preferences in Indonesia. Generations Z and Y, highly skilled in using technology, are more comfortable using online investment platforms and mobile applications, making it easier to access and manage investments.

1. LITERATURE REVIEW AND HYPOTHESES

Investment decisions are a continuous investment process. If the performance measurement and evaluation stage has been passed and the results are not good, the investment decision can be started again until optimal results are achieved (Murphy et al., 2016). The concept of investing entails the act of postponing immediate consumption in order to allocate resources towards productive assets for a particular duration (Krawiec & Szydłowski, 2017). Investment refers to allocating financial resources or assets to generate future advantages. It involves committing a specific quantity of finances or resources from external sources to generate a sequence of returns over time. Investment activities refer to investing money by buying different financial assets (securities) or tangible assets (land, housing, or gold). This means that investment activities are activities carried out to avoid spending current money on purposeful activities to increase future profits (Berger & Udell, 1998). Investment decision behavior is the action of a policy decision taken in investing in assets or capital that will provide future benefits. An investment decision is a strategic approach that involves evaluating and selecting multiple investment possibilities to maximize future returns (Wen, 2010).

Financial literacy refers to an individual's capacity to comprehend and utilize financial information proficiently when making personal financial choices, including those related to investments (Lusardi, 2019; Gunawan et al., 2023; Wahyuni et al., 2023; Lusardi & Messy, 2023). Previous studies show that a high level of financial literacy is positively related to more intelligent and better investment decisions (Alaaraj & Bakri, 2020; Bai, 2023; Zhao & Zhang, 2021). Individuals with good financial literacy tend to manage investment risks better, understand expected returns, and make more informed decisions based on knowledge of various investment instruments (Baihaqqy et al., 2020; Weixiang et al., 2022). Diacon and Hasseldine (2007) have been identified as influencing risk perception and investment returns. Typically, individuals who are more financially literate have a more comprehensive of the risks associated with various investments and can evaluate the return potential of those investments more accurately.

Perception of risk and return refers to how individuals assess the level of risk involved in an investment and their expectations of the expected returns from that investment (Huber & Huber, 2019; Jonathan & Sumani, 2021; Singh & Bhattacharjee, 2019). Previous studies show that these perceptions are crucial to a person's investment decisions. Individuals who have a high perception of risk tend to prefer to avoid risk and choose more conservative investments. In contrast, someone with a low perception of risk tends to be more willing to take higher risks for potentially greater returns (Almansour et al., 2023; Hoffmann & Post, 2017; Khan, 2016). Several studies have identified that perceptions of risk and return are also influenced by psychological and social factors, such as experience, education, and social-environmental influences (Hamilton & Lobel, 2015; Zhao & Zhang, 2021). For example, individuals who have had positive experiences with investing or have a high educational background tend to have lower risk perceptions and are more confident in making bolder investment decisions.

Family background includes parental education, financial values taught, family investment experience, and norms and habits in the family environment (Ameliawati & Setiyani, 2018). Previous research shows that family background significantly influences a person's financial attitudes and behavior, including making investment decisions (Barnea et al., 2010; Jonathan & Sumani, 2021). Individuals raised in a family environment emphasizing the importance of wise financial management tend to have a more positive attitude toward investing. They

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may be bolder in taking certain investment risks. Several studies also highlight that family background can influence perceptions of investment risk and return and the ability to plan long-term in building an investment portfolio. For example, individuals with greater access to financial education and investment experience from their parents may be better prepared emotionally and knowledgeably to weather market fluctuations and make smarter investment decisions.

Income is the main factor influencing an individual's ability to invest and choose investment products that suit a person's financial goals and risk profile. Previous research shows that individuals with higher incomes tend to have greater access to a variety of investment options (Jonathan & Sumani, 2021; Mouna & Anis, 2017; Sugiarto et al., 2024). This means individuals can allocate assets into various investment instruments, such as stocks, bonds, mutual funds, and others, according to their risk preferences and long-term investment goals. Higher income also allows individuals to assume the greater investment risk. Risk in investments is often associated with the potential for higher returns. Individuals can take risks to achieve higher investment returns. Thus, income affects the amount of money that can be invested and provides greater flexibility in diversifying the investment portfolio and taking advantage of riskier investment opportunities with the potential for greater returns.

The ability to use fintech is becoming increasingly important in today's digital era, where technology has changed the way individuals access, analyze, and manage investments (Barroso & Laborda, 2022; Buchak et al., 2018; Abu Daqar et al., 2020; Nelaturu et al., 2022). Previous studies show that individuals skilled in using fintech platforms and applications tend to be more active in managing investment portfolios. Individuals can more efficiently monitor investment performance, adjust investment strategies in real time, and make decisions based on more accurate and up-to-date data (Tomia & Tuharea, 2024; Paramita & Palesta, 2024). However, the literature also identifies that proficiency levels in fintech can vary significantly across individuals and demographic groups. Factors such as education, access to technology, and familiarity with technology influence how effectively individuals adopt and utilize fintech innovations in making investment decisions. In addition, challenges related to data privacy and security and the complexity of new technologies can also influence the level of fintech adoption in investment practices.

Apart from that, understanding and ability to use fintech can mediate the relationship between financial literacy, perceptions of risk and return, family background, income, and investment decisions of Generation Z and Millennials. First, the literature on financial literacy shows that knowledge and understanding of basic financial concepts play a crucial role in shaping individual investment behavior. Individuals with a high level of financial literacy can make more informed and rational investment decisions and better manage risks and investment return expectations. Furthermore, risk perceptions can influence a person's investment preferences, whereas individuals with high-risk perceptions tend to choose more conservative investments. In contrast, those with low-risk perceptions may be more likely to take more significant risks to achieve expected returns. Family background and income level are also essential factors in shaping investment decisions. Research shows that individuals who are raised in families with solid financial values or have higher incomes tend to have greater access and ability to invest and are better prepared to face market risk and volatility (Chaulagain, 2017; Khan et al., 2020; Prasad et al., 2021). This study aims to investigate the factors that influence investment decision-making for generations Z and Y, using the fintech platform as a mediator for these factors. In this context, proficiency in using financial technology becomes a vital mediator that can influence the relationship between these factors and investment decisions. Fintech platforms can effectively mitigate the impact of financial literacy, perceptions of risk and return, familial background, and income on the investment decision-making process.

This study aims to investigate the impact of financial literacy, risk and return perceptions, family background, income, and financial technology proficiency on investment decisions among Generations Z and Y in Indonesia. Based on the literature review, the hypotheses of this study are:

H1: There is an influence of financial literacy on investment decisions.

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H2: *There is an influence of perceptions of risk and return on investment decisions.*

H3: *There is an influence of family background on investment decisions.*

H4: *There is an influence of income on investment decisions.*

H5: *There is an influence of financial technology proficiency on investment decisions.*

H6: *Financial technology proficiency mediates the influence of financial literacy on investment decisions.*

H7: *Financial technology proficiency mediates the influence of perceptions of risk and return on investment decisions.*

H8: *Financial technology proficiency mediates the influence of family background on investment decisions.*

H9: *Financial technology proficiency mediates the influence of income on investment decisions.*

Figure 1 depicts the framework of this study.

2. METHODOLOGY

This study uses a quantitative method to determine the investment behavior of Gen Z and Gen Y in Indonesia. Generations Z and Y were chosen as research objects because 55% of Gen Z and Y in Indonesia live in urban areas and are more information literate, especially about investment information and information technology. The purposive sampling technique was employed to select 240 respondents as the research object. A questionnaire survey was implemented to gather respondents' perceptions and investment decisions as primary data. By soliciting responses to inquiries and statements, the Likert scale evaluates indicators. The Structural Equation Model Partial Least Square (SEM-PLS) model was employed to conduct data analysis, as it is deemed appropriate for testing intricate relationships between variables within the context of this research (Hair et al., 2021). Statistical analysis and data processing were implemented with the assistance of WarpPLS 8.0 software. This method was selected to gain a comprehensive understanding of the factors that influence the investment behavior of Generations Z and Y and offer valuable insights for the financial industry in developing products and services that better meet the needs of this demographic group.

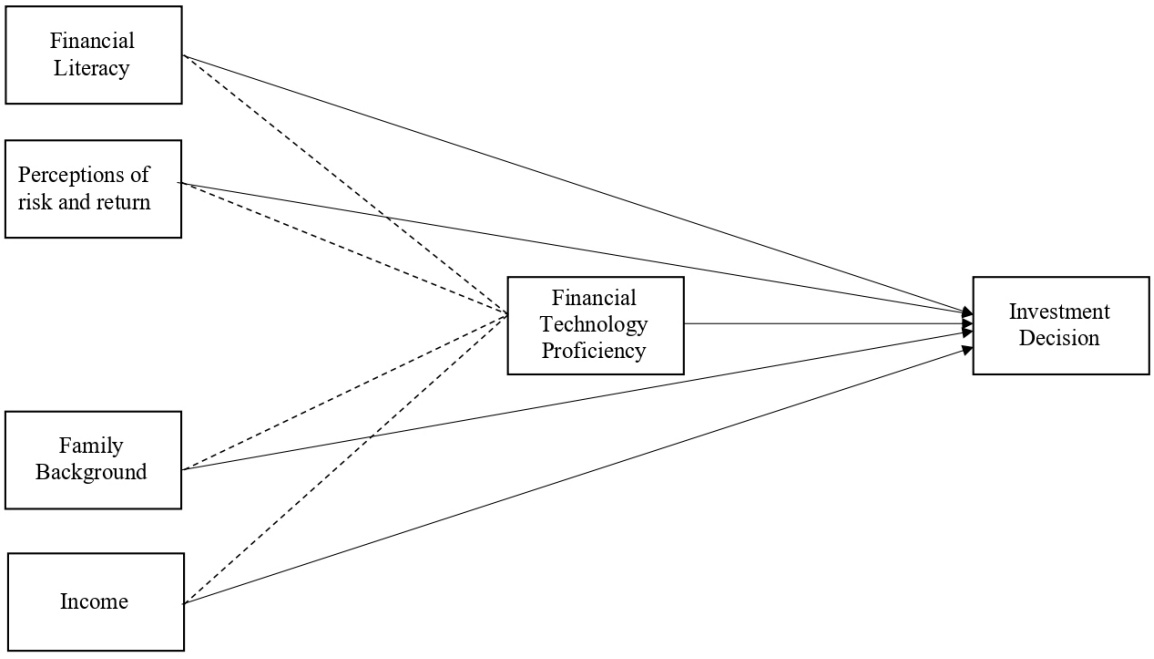

Figure 1. Research framework

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3. RESULTS

This study uses SEM-PLS to analyze the relationship between variables. A critical aspect of SEM-PLS is evaluating the outer model, which aims to ensure convergent validity. Convergent validity measures how effectively an indicator reflects the concept it is intended to measure. The factor loading test is used to assess convergent validity, focusing on the strength of the relationship between the indicator and the construct being measured, as well as the indicator's ability to describe the overall variability of the construct. The results of the factor loading test in this study showed significant values above 0.70 for all indicators, indicating a strong relationship and a good representation of construct variability.

Table 1 presents the test results for all variables and indicators. The resulting outer loading value varies for each indicator for the latent variable. Indicators with an outer loading value above 0.70 are considered valid and meet the requirements for further analysis.

The AVE value demonstrates an adequate level of convergent validity, which means that one latent variable can explain more than half of the average variance of the existing indicators. The AVE value should generally be more than 0.50 to indicate good convergent validity.

Analysis of Average Variance Extracted (AVE) values shows that all construct AVE values exceed 0.5. This shows a good level of convergent validity, in-

Table 1. Loading factor

Construct	Indicators	FL (X1)	PRR (X2)	FBG (X3)	INC (X4)	FTEP (Z)	IDC (Y)	Critical Point	Conclusion
	X1.1	0.884	−0.442	0.450	0.008	0.016	0.010	0.70	Valid
	X1.2	0.857	−0.236	0.206	−0.061	−0.006	0.040	0.70	Valid
	X1.3	0.849	−0.528	0.484	−0.079	0.045	0.046	0.70	Valid
	X1.4	0.877	0.343	−0.393	0.007	−0.015	0.044	0.70	Valid
	X1.5	0.905	−0.206	0.176	−0.054	−0.022	−0.023	0.70	Valid
	X1.6	0.912	0.040	−0.039	−0.042	0.010	0.014	0.70	Valid
FL(X1)	X1.7	0.928	0.161	−0.189	0.037	−0.117	0.074	0.70	Valid
	X1.8	0.891	0.202	−0.213	−0.042	−0.019	0.088	0.70	Valid
	X1.9	0.917	0.041	−0.003	0.020	0.040	−0.062	0.70	Valid
	X1.10	0.933	0.033	0.002	0.021	−0.001	0.000	0.70	Valid
	X1.11	0.907	−0.009	0.025	0.059	0.017	−0.038	0.70	Valid
	X1.12	0.937	0.207	−0.176	0.084	0.015	−0.099	0.70	Valid
	X1.13	0.910	0.337	−0.282	0.030	0.040	−0.084	0.70	Valid
	X2.1	0.061	0.905	0.267	0.026	−0.000	−0.036	0.70	Valid
	X2.2	−0.002	0.927	0.183	0.040	−0.012	−0.001	0.70	Valid
	X2.3	0.011	0.955	0.019	−0.013	−0.015	0.017	0.70	Valid
	X2.4	0.043	0.895	−0.424	−0.029	−0.049	−0.027	0.70	Valid
	X2.5	−0.023	0.933	−0.495	0.043	−0.025	−0.002	0.70	Valid
PRR (X2)	X2.6	0.015	0.954	−0.223	0.005	0.019	−0.048	0.70	Valid
	X2.7	0.003	0.966	−0.177	0.015	−0.002	−0.025	0.70	Valid
	X2.8	−0.018	0.942	−0.064	−0.037	−0.003	0.024	0.70	Valid
	X2.9	−0.028	0.936	−0.161	−0.003	0.036	0.004	0.70	Valid
	X2.10	−0.024	0.939	0.435	−0.039	0.047	0.036	0.70	Valid
	X2.11	−0.034	0.930	0.643	−0.008	0.000	0.058	0.70	Valid
	X3.1	−0.014	0.079	0.924	−0.050	0.009	0.062	0.70	Valid
	X3.2	−0.017	0.031	0.960	−0.011	0.018	0.013	0.70	Valid
	X3.3	0.021	0.073	0.949	−0.024	−0.023	0.038	0.70	Valid
	X3.4	−0.019	−0.087	0.949	0.016	0.006	−0.014	0.70	Valid
	X3.5	−0.018	0.016	0.962	0.004	0.004	0.009	0.70	Valid
FBG (X3)	X3.6	0.023	0.126	0.916	0.019	0.021	−0.034	0.70	Valid
	X3.7	0.021	0.069	0.965	0.021	−0.015	−0.023	0.70	Valid
	X3.8	0.012	−0.220	0.938	−0.037	0.030	0.005	0.70	Valid
	X3.9	0.016	−0.019	0.957	0.042	−0.041	−0.021	0.70	Valid
	X3.10	0.005	0.134	0.958	0.006	0.012	−0.043	0.70	Valid
	X3.11	−0.029	−0.204	0.940	0.014	−0.019	0.009	0.70	Valid

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Table 1 (cont.). Loading factor

Construct	Indicators	FL (X1)	PRR (X2)	FBG (X3)	INC (X4)	FTEP (Z)	IDC (Y)	Critical Point	Conclusion
INC (X4)	X4.1	0.008	−0.223	0.245	0.927	−0.029	−0.009	0.70	Valid
	X4.2	−0.003	0.112	−0.107	0.932	−0.002	−0.059	0.70	Valid
	X4.3	0.010	0.001	−0.021	0.957	0.053	−0.032	0.70	Valid
	X4.4	−0.001	0.061	−0.065	0.951	0.020	0.023	0.70	Valid
	X4.5	−0.016	0.126	−0.114	0.958	0.012	−0.002	0.70	Valid
	X4.6	−0.002	0.054	−0.045	0.962	−0.021	0.031	0.70	Valid
	X4.7	0.004	−0.139	0.115	0.939	−0.034	0.048	0.70	Valid
FTEP (Z)	Z1	−0.019	0.177	−0.180	0.156	0.931	−0.112	0.70	Valid
	Z2	−0.012	0.311	−0.336	−0.003	0.942	0.028	0.70	Valid
	Z3	0.008	−0.060	0.090	0.076	0.946	−0.092	0.70	Valid
	Z4	0.025	−0.019	0.040	0.079	0.950	−0.104	0.70	Valid
	Z5	−0.021	0.073	−0.055	0.094	0.966	−0.074	0.70	Valid
	Z6	0.009	−0.146	0.172	0.032	0.953	−0.071	0.70	Valid
	Z7	−0.011	−0.081	0.112	−0.021	0.952	−0.016	0.70	Valid
	Z8	−0.004	−0.136	0.124	−0.070	0.961	0.065	0.70	Valid
	Z9	0.020	−0.096	0.097	−0.079	0.957	0.049	0.70	Valid
	Z10	0.016	−0.145	0.127	−0.119	0.956	0.099	0.70	Valid
	Z11	0.014	0.052	−0.090	−0.082	0.953	0.107	0.70	Valid
	Z12	−0.026	0.079	−0.109	−0.057	0.949	0.119	0.70	Valid
IDC (Y)	Y1	0.009	−0.108	0.122	−0.003	0.102	0.926	0.70	Valid
	Y2	−0.009	−0.487	0.465	−0.082	0.070	0.919	0.70	Valid
	Y3	0.014	−0.490	0.458	−0.086	0.083	0.915	0.70	Valid
	Y4	−0.022	−0.132	0.116	−0.117	0.103	0.878	0.70	Valid
	Y5	−0.015	−0.221	0.242	−0.079	0.070	0.931	0.70	Valid
	Y6	−0.043	0.085	−0.080	0.046	−0.043	0.915	0.70	Valid
	Y7	−0.006	−0.006	0.055	0.002	−0.007	0.934	0.70	Valid
	Y8	0.039	−0.005	0.062	−0.002	−0.028	0.925	0.70	Valid
	Y9	−0.026	0.043	−0.033	0.037	−0.003	0.938	0.70	Valid
	Y10	−0.004	−0.069	0.062	0.041	0.010	0.928	0.70	Valid
	Y11	−0.002	−0.043	0.073	0.027	0.001	0.943	0.70	Valid
	Y12	−0.045	0.386	−0.420	0.050	0.034	0.911	0.70	Valid
	Y13	−0.029	0.099	−0.116	0.013	−0.041	0.889	0.70	Valid
	Y14	0.012	0.571	−0.623	−0.035	−0.112	0.791	0.70	Valid
	Y15	0.027	0.049	−0.085	−0.006	−0.141	0.814	0.70	Valid
	Y16	0.072	0.095	−0.058	0.093	−0.078	0.900	0.70	Valid
	Y17	−0.010	0.558	−0.573	0.029	−0.030	0.892	0.70	Valid
	Y18	0.044	−0.228	0.220	0.067	−0.022	0.885	0.70	Valid

dicating the strength of the construct in explaining variations in related indicators.

The discriminant validity test then ensures that the measured construct differs from other constructs regarding the relationship between constructs. The AVE test, on the other hand, ensures that the variance of the construct measured is greater than the variance measured by other variables.

Analysis of the Discriminant Validity Test results, presented in Table 3 using the Fornell-Larcker

Table 2. Average Variance Extracted (AVE)

Variables	AVE	Critical Point	Conclusion
FL (X1)	0.811	0.50	Good Validity
PRR (X2)	0.874	0.50	Good Validity
FBG (X3)	0.897	0.50	Good Validity
INC (X4)	0.897	0.50	Good Validity
FTEP (Z)	0.905	0.50	Good Validity
IDC (Y)	0.815	0.50	Good Validity

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Table 3. Fornell-Larcker criterion

Construct	FL(X1)	PRR(X2)	FBG(X3)	INC(X4)	FTEP(Z)	IDC(Y)
FL (X1)	0.901	0.599	0.583	0.634	0.509	0.672
PRR (X2)	0.599	0.935	0.934	0.660	0.527	0.684
FBG (X3)	0.583	0.934	0.947	0.695	0.516	0.688
INC (X4)	0.634	0.660	0.695	0.947	0.612	0.760
FTEP (Z)	0.509	0.527	0.516	0.612	0.952	0.654
IDC (Y)	0.672	0.684	0.688	0.760	0.654	0.903

Criteria, confirms good discriminant validity for the constructs in the research model. An AVE value (diagonal) higher than the correlation between constructs (off the diagonal) indicates that each is unique and different from other constructs, which indicates good discriminant validity for the constructs in the model.

Next, the reliability test, which consists of Composite Reliability and Cronbach's Alpha, is used to ensure the reliability of indicators when measuring a construct. Composite Reliability is generally recommended because it provides a more accurate assessment considering the construct's loading weight and measurement error.

The reliability test results for all constructs in the research model are analyzed using Cronbach's Alpha and Composite Reliability methods. The values listed indicate the level of reliability of each construct. All constructs in Table 4 have Cronbach's Alpha values above 0.60 and Composite Reliability above 0.70. This provides strong evidence of reliability for each construct and dimension when measuring the variables.

R-squared is a metric that measures how much of the variance in the dependent variable is explained by the independent variable. R-squared values range between 0 and 1, with higher values indicating a more significant explanation of the variance in the dependent variable. This study applies the R-squared value to endogenous latent variables: company performance and green value. The R-squared interpretation criteria are 0.67 for high, 0.33 for moderate, and 0.19 for low.

Table 5. R-square

Variables	R-square	Adjusted R-square	Criteria
Quality Audits	0.698	0.692	Big Effect

Table 5 shows an R-squared value of 0.698 for the Audit Quality variable, categorized as Big Effect. This shows that the independent variable, namely financial technology proficiency, mediates the influence of financial literacy, perceptions of risk and return, family background, and income, significantly explaining 69.8% of the variance in investment decisions.

This study uses the Partial Least Squares (PLS) method to build models and formulate hypotheses. Hypothesis testing was carried out with a significance level of 0.05. The detailed results of hypothesis testing are presented in Table 6.

Based on the results of the research tests shown in Table 6, the conclusion is regarding the impact of financial technology proficiency, which mediates the influence of financial literacy, perceptions of risk and return, family background, and income on investment decisions of generations Z and Y in Indonesia. The research results show that financial literacy positively and significantly influences investment decisions, with a path coefficient (β) of 0.194 and a p-value of

Table 4. Cronbach's alpha and construct reliability

Variables	Cronbach's Alpha	Critical Point	Composite Reliability	Critical Point	Conclusion
FL (X1)	0.981	0.60	0.982	0.70	Reliable
PRR (X2)	0.986	0.60	0.987	0.70	Reliable
FBG (X3)	0.989	0.60	0.990	0.70	Reliable
INC (X4)	0.981	0.60	0.984	0.70	Reliable
FTEP (Z)	0.991	0.60	0.991	0.70	Reliable
IDC (Y)	0.987	0.60	0.988	0.70	Reliable

Table 6. Estimated results

Path	β	P
Financial Literacy → Investment Decisions	0.194	0.001
Perceptions of Risk and Return → Investment Decisions	0.221	<0.001
Family Background → Investment Decisions	−0.042	0.258
Income → Investment Decisions	0.364	<0.001
Financial Technology Proficiency → Investment Decisions	0.236	<0.001
Financial Literacy → Financial Technology Proficiency → Investment Decisions	0.142	0.012
Perceptions of Risk and Return → Financial Technology Proficiency → Investment Decisions	0.498	<0.001
Family Background → Financial Technology Proficiency → Investment Decisions	0.359	<0.001
Income → Financial Technology Proficiency → Investment Decisions	0.429	<0.001

0.001. Perceptions of risk and return also have a significant favorable influence on investment decisions, with a β of 0.221 and a p-value of less than 0.001. These results indicate that individual perceptions regarding the risk and potential returns of investment significantly influence the investment decisions of generations Z and Y in Indonesia. Meanwhile, the family background does not significantly influence investment decisions, with β of –0.042 and a p-value of 0.258. These results indicate that family factors have not played an important role in investment decisions for generations Z and Y in Indonesia. This is because Generation Z and Y investment decisions in Indonesia prefer to learn about investment themselves rather than relying on family background. Income significantly influences investment decisions, with a β of 0.364 and a p-value of less than 0.001. The ability to use financial technology also significantly influences investment decisions, with a β of 0.236 and a p-value of less than 0.001. This shows that proficiency in using fintech helps individuals make better investment decisions. The results of the mediation test show the fintech's ability to mediate the influence of several factors on investment decisions. Financial literacy mediated by fintech skills significantly influences investment decisions, with a β of 0.142 and a p-value of 0.012. Likewise, risk and return perceptions mediated by fintech expertise significantly influence investment decisions, with a β of 0.498 and a p-value of less than 0.001. Apart from that, family background, mediated by fintech proficiency, also significantly influences investment decisions, with a β of 0.359 and a p-value of less than 0.001. Finally, income mediated by fintech expertise significantly influences investment decisions, with a β of 0.429 and a p-value of less than 0.001.

4. DISCUSSION

This study shows that financial literacy positively and significantly influences the investment decisions of generations Z and Y. The high level of financial literacy is because this generation better understands various investment instruments, the associated risks, and their potential returns. Many financial education platforms and investment applications provide easy-to-understand information and analysis, helping young investors make better decisions. For example, applications such as Ajaib or Bareksa, popular in Indonesia, offer investment guides and analysis tools that are very useful for new users. Also, risk and return perceptions significantly influence investment decisions. This generation understands risk and potential returns well and tends to make more strategic and balanced investment decisions. This can be seen from the increasing number of young people diversifying their investment portfolios, including investing in stocks, bonds, mutual funds, and even cryptocurrencies. This generation is less likely to be afraid to take higher risks if they believe in the potential for greater returns. Previous research supports this study's findings (Adil et al., 2022; Aren & Zengin, 2016; Seraj et al., 2022). It indicates that financial literacy has a significant impact on investment decisions.

Interestingly, family background does not have a significant influence on investment decisions. This is because Generation Z and Millennials are more independent in seeking information and learning about investments. They are more likely to rely on online resources and investment communities to gain knowledge and insight. For example, investment forums such as Stockbit or discussion groups on social media are often places for this generation to share information and experiences. Meanwhile, income has a significant favorable influence on in-

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vestment decisions. Individuals with higher incomes have more choices in diversification, asset allocation, and the ability to assume greater risk. Today, young professionals with high salaries tend to invest in higher-risk assets such as shares or property to achieve higher returns. This study's results contradict the research, showing that family background significantly affects investment decisions (Soleha & Hartati, 2021).

The ability to use fintech also has a significant favorable influence on investment decisions. Fintech makes accessing financial information, analytical tools, and investment platforms that help individuals manage their portfolios easy. For example, using applications such as GoPay for mutual fund investments or OVO Invest for shares allows the younger generation to invest quickly and efficiently. The results of the mediation test show that fintech proficiency increases the positive effects of financial literacy, risk and return perceptions, family background, and income on investment decisions. Financial literacy mediated by fintech skills significantly influences investment decisions, indicating that mastery of technology is essential in optimizing financial literacy. Likewise, risk and return perceptions mediated by fintech proficiency suggest that technology can help individuals make better investment decisions by providing quick and easy access to relevant information.

This study strengthens the findings in existing literature regarding factors that influence investment decisions. Financial literacy, an individual's ability to understand and use financial information effectively, has positively influenced investment decisions. Previous studies also show that individuals with a high level of financial literacy tend to make smarter and better investment decisions (Rahim Khan et al., 2020; Aren & Aydemir, 2015; Sugiarto et al., 2024; Arianti, 2017; Dewi et al., 2020; Zhao & Zhang, 2021; Iram et al., 2023; Maheshwari et al., 2024). For example, studies by Chaulagain (2017), Morgan and Long (2020), Ashfaq et al. (2024), and Maheshwari et al. (2024) show that good financial literacy is related to an individual's ability to manage investment risks and understand expected returns.

The results of this study are also consistent with the finding that risk and return perceptions play an important role in investment decisions. Individuals with a low-risk perception tend to be more willing to take more significant risks for higher returns. In contrast, those with high-risk perceptions tend to choose more conservative investments. Huber and Huber (2019), Almansour et al. (2023), Ren (2022), Hoffmann and Post (2017), Mardikaningsih and Darmawan (2023), Nguyen et al. (2016), and Prasad et al. (2021) found that psychological and social factors, such as experience and education strongly influence individuals' perceptions of risk and return. Risk and return perceptions play an important role in influencing investment decisions. Research has shown that individuals' risk assessments, influenced by psychological characteristics and states, significantly impact their investment choices (Nareswari et al., 2022). Risk perception is subjective and involves evaluating the level of risk and uncertainty associated with an investment decision(Fahim et al., 2019). Additionally, risk perception has been identified as a mediator between behavioral biases and investment decisions, indicating its essential role in shaping individual judgments. Studies have highlighted that risk perception is a crucial factor influencing investment behavior, with empirical evidence showing that risk tolerance, risk perception, and financial literacy are significant determinants of investment decisions and people's financial well-being. Additionally, risk perception has significantly affected investment decisions among Generation Z individuals. Additionally, risk perception has been shown to mediate the relationship between behavioral bias and investor judgment, emphasizing its role in moderating the impact of bias on decision-making (Ahmed et al., 2022).

Regarding family background, this study shows that this factor does not significantly influence the investment decisions of Gen Z and Gen Y in Indonesia. This differs from previous studies, which found that family background plays a vital role in shaping a person's financial attitudes and behavior. For example, research (Koropp et al., 2014; Anderson et al., 2012; Li & Qiu, 2018) shows that parental education and family investment experience can influence risk perception and investment decisions. However, this study shows that generations Z and Y in Indonesia rely more on online information sources and investment communities rather than family influence. Family background has been shown to influence investment decisions in family firms significantly. Research shows that family characteristics, such as

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family ownership, play an essential role in shaping investment strategies, especially in family firms (Wang et al., 2023). Family involvement in management has been shown to affect innovation investment and product innovation within a company. Additionally, decision-making processes in family-controlled firms are influenced by the desire to protect socioemotional wealth, leading to a willingness to accept risks to performance while avoiding decisions that could exacerbate those risks. Family control and influence, including family members in critical positions such as CEO and board chairs, have positively influenced corporate investments in research and development (R&D). Furthermore, the continuation of the management team in a family firm post-inheritance can influence investment decisions, with successors able to make better decisions when equipped with relevant information(Wu et al., 2021).

Income is also proven to significantly influence investment decisions, which aligns with findings in the literature. Individuals with higher incomes have more investment options and can assume more significant risks. Studies by Mouna and Anis (2017) and Sugiarto et al. (2024) support these findings, suggesting that higher incomes allow for broader investment diversification and greater risk-taking to achieve higher returns. Income is an essential factor influencing investment decisions. Research has shown that personal income substantially positively impacts investment decisions (Yusnita et al., 2022). Higher income levels are associated with more profitable investment options due to increased financial resources available for investment purposes. Additionally, revenue diversification has positively influenced financial performance, suggesting that a diversified revenue portfolio can produce better results for commercial banks (Luu et al., 2020). Additionally, there is a positive correlation between investment decisions and an individual's monthly income level (Nasage, 2019). Furthermore, demographic factors such as income directly shape behavioral biases, impacting investment decisions (Kasilingam, 2008). Age, gender, education, occupation, profession, financial dependents, and income influence an individual's investment behavior. A study highlights that gender and income differences significantly impact rational decision-making processes, suggesting that income levels influence individuals' investment choices (Kumar et al., 2018).

The ability to use fintech was also found to significantly influence investment decisions, supporting previous research that shows that financial technology facilitates access to information, analytical tools, and investment platforms. Paramita and Palesta (2024), Tomia and Tuharea (2024), Buchak et al. (2018), and Abu Daqar et al. (2020) show that fintech can reduce transaction costs and increase market efficiency, which ultimately helps individuals make better investment decisions. The results of the mediation test in this study also show that fintech skills can mediate the influence of financial literacy, perceptions of risk and return, family background, and income on investment decisions. A study by Jonathan and Sumani (2021) shows that financial technology can help improve financial literacy by providing access to better information and learning tools. Likewise, Almansour et al. (2023) show that perceptions of risk and return can be mediated by the ability to access and analyze financial information via fintech platforms. Thus, this study emphasizes the importance of proficiency in financial technology to optimize investment decisions for generations Z and Y in Indonesia. By mastering fintech, the younger generation can use financial literacy, understand risks and returns, and manage their income more effectively to achieve their desired investment goals. These findings provide valuable insights for financial service providers and educators to design programs and tools that better meet the needs and preferences of this demographic group.

This research finding implies that programs to increase financial literacy and financial technology proficiency must be a top priority for policymakers, financial service providers, and educators in Indonesia. Comprehensive, technology-based financial education can help generations Z and Y make better investment decisions. Online resources and investment communities must be integrated into educational strategies because this generation is more likely to learn from digital platforms. In addition, fintech service providers must continue to develop features and tools that can improve users' understanding of investment and skills. Proficiency in using fintech has been proven to strengthen the positive effects of financial literacy, risk perception, and income on investment decisions. Hence, innovation in fintech needs to be encouraged to support young investors.

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CONCLUSION

This study investigates the impact of financial literacy, risk and return perceptions, family background, income, and financial technology proficiency on investment decisions among Generations Z and Y in Indonesia. The study reveals that financial literacy, perception of risk and return, income, and fintech skills influence the investment decisions of generations Z and Y in Indonesia. Interestingly, family background does not have a significant influence on investment decisions. Generations Z and Y rely on online resources and investment communities to gain knowledge and insight. Meanwhile, fintech proficiency increases the positive effects of financial literacy, risk and return perceptions, family background, and income on generation Z and Y investment decisions in Indonesia.

These research recommendations provide essential insights that can be applied by policymakers, financial service providers, and educators. The government can develop financial education programs in schools and universities that are integrated with modern financial technology. Financial service providers such as banks and fintech companies can create applications and platforms that are more user-friendly and offer interactive financial education features. In addition, educators can use digital tools and resources to teach students about financial management and investments, leveraging social media and educational videos to reach a more youthful audience.

This study also opens up opportunities for further exploration of other factors that influence the investment decisions of generations Z and Y. For example, further studies could examine the impact of financial influencers on social media on investment decisions or how loyalty programs and incentives from fintech platforms can motivate better investment behavior. Thus, these findings provide practical guidance and spur innovation to support the younger generation in making wiser and more informed investment decisions.

AUTHOR CONTRIBUTIONS

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