



DOI: <https://doi.org/10.38035/gijea.v4i2>  
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## The Impact of Cognitive, Digital, and Psychological Factors on Risky Investment Decisions among Generation Z Investors in Indonesia: The Role of Economic Capability

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**Abstract:** The rapid growth of digital technology and online investment platforms has significantly increased Generation Z participation in risky investment activities in Indonesia. As digital natives, Generation Z relies heavily on digital information, social media, and financial influencers when making investment decisions. However, investment behavior is influenced not only by knowledge and information but also by psychological and economic factors. This study aims to analyze the effects of financial literacy, digital literacy, perceived trust, financial influencers, psychological bias, and risk attitude on risky investment decisions among Generation Z investors in Indonesia. Furthermore, the study examines the moderating role of economic capability in strengthening the relationships between behavioral factors and risky investment decisions. This research employs a quantitative approach using a survey method. Data were collected through structured questionnaires distributed to Generation Z investors and analyzed using Structural Equation Modeling. Using Structural Equation Modeling based on Partial Least Squares (PLS-SEM) with data from 275 Generation Z investors across six Indonesian regions, the model explained 63.6% of the variance in risky investment decisions ( $R^2 = 0.636$ ;  $Q^2 = 0.564$ ;  $GoF = 0.586$ ). Financial literacy was the only determinant with a significant individual path effect ( $\beta = 0.192$ ;  $p = 0.049$ ). Because the behavioral constructs were highly intercorrelated, the study applied an inferential triangulation strategy combining individual-path testing with block-level hierarchical regression. This revealed that the cognitive-capability block (financial and digital literacy) and the psychological-behavior block (psychological bias and risk attitude) contributed significant incremental variance, whereas perceived trust and financial influencers did not. Economic capability operated as a dominant direct predictor (explaining 53.2% of baseline variance) rather than as a moderator; none of its three moderating effects was significant. The findings indicate that risky investment decisions among Generation Z are driven primarily by internal cognitive and behavioral dispositions operating as an integrated cluster rather than by

external social influences, contributing methodological and contextual insights to behavioral finance literature.

**Keyword:** Risky Investment Decisions, Financial Literacy, Digital Literacy, Psychological Bias, Economic Capability, Generation Z Investors.

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## INTRODUCTION

The rapid advancement of digital technology has transformed the investment landscape globally, including in Indonesia. The emergence of digital investment platforms, financial technology services, and social media has significantly increased public participation in investment activities, particularly among Generation Z. As digital natives, Generation Z demonstrates a high level of familiarity with technology and relies extensively on digital information when making financial decisions. Recent evidence indicates that Generation Z begins investing at an earlier age than previous generations and actively utilizes social media, digital applications, and online communities as primary sources of investment information (Investopedia, 2024).

The growing participation of Generation Z in financial markets is accompanied by increasing interest in high-risk investment instruments such as stocks, mutual funds, exchange-traded funds, and cryptocurrencies. According to Katadata (2023), more than 72% of Indonesian Generation Z investors engage in investment activities to achieve long-term financial goals, including education funding, home ownership, and retirement preparation. However, despite the increasing number of investors, the quality of investment decision-making remains a concern due to varying levels of financial knowledge and behavioral influences.

Traditional finance theory assumes that investors behave rationally and make decisions aimed at maximizing expected utility. Nevertheless, numerous studies have shown that actual investment decisions are frequently influenced by emotions, cognitive limitations, and behavioral biases (Barberis & Thaler, 2003; Statman, 2019). Behavioral Finance Theory explains that investors often deviate from rational behavior due to psychological factors such as overconfidence, herding behavior, anchoring bias, and loss aversion, leading to suboptimal investment decisions (Ackert & Deaves, 2010; Barberis & Thaler, 2003).

Financial literacy has been widely recognized as one of the most important determinants of investment behavior. Financial literacy refers to the knowledge, skills, confidence, and attitudes required to make effective financial decisions (OECD, 2020). Investors with higher levels of financial literacy are generally better able to evaluate risk-return trade-offs, diversify portfolios, and select appropriate investment instruments (Lusardi & Mitchell, 2014; Van Rooij et al., 2011). Previous studies have consistently demonstrated that financial literacy positively influences investment decision-making and participation in financial markets (Awais et al., 2016; Adil et al., 2023).

In addition to financial literacy, digital literacy has become increasingly important in the digital investment environment. Based on the Technology Acceptance Model, technology adoption is influenced by perceived usefulness and perceived ease of use (Davis, 1989; Venkatesh & Davis, 2000). Digital literacy enables individuals to access, evaluate, and utilize online information effectively when making investment decisions. Investors with strong digital literacy are more capable of identifying reliable financial information and avoiding misinformation in digital environments (Venkatesh et al., 2003).

The increasing popularity of social media has also enhanced the role of financial influencers in shaping investment behavior. Source Credibility Theory suggests that individuals are more likely to accept information from sources perceived as trustworthy and

knowledgeable (Hovland et al., 1953; Pornpitakpan, 2004). Financial influencers often simplify complex financial concepts and provide investment-related content that attracts younger audiences. Consequently, many Generation Z investors rely on financial influencers as sources of information and investment recommendations.

Psychological factors also play a significant role in investment decision-making. Prospect Theory argues that individuals evaluate gains and losses relative to a reference point and experience losses more intensely than equivalent gains (Kahneman & Tversky, 1979). This phenomenon, known as loss aversion, often causes investors to make irrational decisions. Investors may hold losing assets for too long, excessively trade securities, or follow market trends without conducting adequate analysis (Khalid et al., 2018). Risk attitude further influences the extent to which individuals are willing to accept uncertainty in pursuit of potential returns. Individuals with higher risk tolerance are generally more willing to invest in volatile financial assets (Weber, Blais, & Betz, 2002; Awais et al., 2016).

Another important factor affecting investment decisions is perceived trust. In digital investment environments, trust in financial institutions, investment platforms, and information providers is essential for reducing uncertainty and encouraging participation in financial markets (Gefen et al., 2003). Investors who trust financial platforms and investment information are more likely to engage in risky investment activities compared to those who perceive greater uncertainty and risk.

Although previous studies have examined the influence of financial literacy, digital literacy, psychological bias, risk attitude, and trust on investment behavior, empirical findings remain inconsistent. Furthermore, most studies have focused on investment performance rather than the decision-making process itself. Limited research has simultaneously examined these variables within a comprehensive framework among Generation Z investors in Indonesia (Ramadhan & Viana, 2023).

Three specific gaps motivate this study. First, prior research has predominantly examined these determinants in isolation or in small combinations, leaving unresolved how cognitive (financial and digital literacy), external (perceived trust, financial influencers), and psychological (psychological bias, risk attitude) factors operate jointly when they are empirically intercorrelated—a condition under which conventional single-path interpretation may misclassify a relevant determinant as irrelevant. Second, existing behavioral-finance models rarely specify the role of economic capability explicitly; it is variously treated as a control, an antecedent, or omitted, and its function as a boundary condition for behavioral effects remains untested among Generation Z. Third, most Indonesian evidence is geographically concentrated in Java and focuses on general investment intention or portfolio performance rather than on risky investment decisions as a distinct outcome. This study addresses these gaps by integrating six determinants with economic capability as a moderator within a single model, by applying an inferential triangulation strategy suited to highly correlated behavioral constructs, and by sampling Generation Z investors across six Indonesian regions.

Economic capability is another factor that deserves attention because investment decisions cannot be separated from an individual's financial resources. Individuals with adequate financial literacy and positive investment attitudes may still be unable to invest if they lack sufficient economic resources (Sari et al., 2021). Therefore, economic capability may strengthen or weaken the relationships between behavioral factors and risky investment decisions.

These theoretical perspectives are integrated into a single behavioral-decision logic rather than treated as parallel lenses. Cognitive resources financial literacy (human-capital and Theory of Planned Behavior perspectives) and digital literacy (Technology Acceptance Model) shape the perceived behavioral control and information-processing capacity that

precede a risk decision. Technology-related and social inputs (digital platforms and financial influencers, the latter through Source Credibility Theory) supply information into this process, but their behavioral impact is conditioned by the investor's psychological dispositions overconfidence, herding, and loss aversion (Prospect Theory) and risk attitude (DOSPERT) which translate information and capability into actual risk-taking. Economic capability is theorized as a boundary condition: financial slack determines whether favorable attitudes and biases can be enacted as real risky positions, consistent with the Permanent Income Hypothesis. The model therefore posits that cognition enables, psychology directs, external cues inform, and economic capacity permits risky investment decisions an explicitly integrated mechanism rather than a list of independent predictors.

Based on the identified research gap, this study aims to analyze the effects of financial literacy, digital literacy, perceived trust, financial influencers, psychological bias, and risk attitude on risky investment decisions among Generation Z investors in Indonesia. In addition, this study investigates the moderating role of economic capability in the relationships between financial influencers, psychological bias, risk attitude, and risky investment decisions. This study offers four contributions. Empirically, it documents a "partial-support" pattern digital literacy, psychological bias, and risk attitude are individually non-significant yet block-significant showing that Generation Z investment determinants operate as integrated capability and disposition clusters rather than as independent factors. Methodologically, it introduces an inferential-triangulation procedure (individual paths, orthogonalized interaction terms, and block-level hierarchical regression) appropriate for behavioral constructs that are inherently collinear, enabling researchers to distinguish genuinely irrelevant variables from relevant-but-collinear ones. Conceptually, it reframes economic capability as a dominant direct antecedent rather than a moderator. Contextually, it extends behavioral-finance evidence to risky investment decisions specifically, using a cross-regional Indonesian Generation Z sample beyond the usual Java concentration.

## **METHOD**

This study employed a quantitative research approach with an explanatory research design to investigate the determinants of risky investment decisions among Generation Z investors in Indonesia. The study was developed based on Behavioral Finance Theory, Theory of Planned Behavior (Ajzen, 1991), Prospect Theory (Kahneman & Tversky, 1979), Technology Acceptance Model (Davis, 1989), and Source Credibility Theory (Hovland et al., 1953).

The target population consisted of Generation Z individuals in Indonesia who had experience investing in financial products such as stocks, mutual funds, cryptocurrencies, and other high-risk investment instruments. A purposive sampling technique was employed to select respondents who met the research criteria. Participants were required to belong to Generation Z and have previous experience in investment activities.

Respondents were recruited through investor WhatsApp groups, social-media investor communities (Instagram, X/Twitter, and TikTok), online forums, and personal networks across six regions. Inclusion criteria were: membership in Generation Z (born 1997–2012), an active capital-market account, active use of digital investment platforms, and prior experience with risky instruments (stocks, equity mutual funds, ETFs, corporate bonds, or derivatives). After screening for completeness and criteria compliance, 275 valid responses were retained for analysis, exceeding the minimum recommended for PLS-SEM of moderate complexity (Hair et al., 2017). Because respondents were recruited through non-probability online channels, a conventional response rate and a formal non-response-bias test could not be computed; this is acknowledged as a limitation.

Data were collected using a structured questionnaire distributed through online platforms. The questionnaire measured financial literacy, digital literacy, perceived trust, financial influencer influence, psychological bias, risk attitude, economic capability, and risky investment decisions. All variables were measured using indicators adapted from previous studies and assessed using a 10-point semantic-differential.

The questionnaire was developed by operationalizing each construct from established instruments: financial literacy from the OECD/INFE (2020) framework (financial knowledge, behavior, and attitude); digital literacy across technical skill, information evaluation, and technology utilization; perceived trust across integrity, competence, and transparency; financial influencer across credibility, information quality, and attractiveness; psychological bias from overconfidence, herd behavior, and loss aversion; risk attitude from the Domain-Specific Risk-Taking (DOSPERT) framework (Weber, Blais, & Betz, 2002); economic capability from fund availability, allocation capacity, income stability, and access to financing; and risky investment decision from four indicators capturing the propensity to take risky positions. All items were measured on a 10-point semantic-differential scale (1 = very low to 10 = very high), and the final instrument comprised 55 indicators across the eight constructs.

Because all variables were self-reported through a single instrument, common method bias (CMB) was assessed using two complementary procedures (Podsakoff et al., 2003; Kock, 2015). Harman’s single-factor test entered all indicators into an unrotated exploratory factor analysis; the first factor explained 42.44% of total variance, below the 50% threshold. A full-collinearity assessment then yielded a maximum VIF of 9.11, below the severe threshold of 10. Both results indicate that common method bias is not a serious concern in the data.

**Table 1. Common Method Bias**

Test	Value	Criterion	Result
Harman’s Single-Factor Test	42.44%	< 50%	Pass
Full Collinearity VIF (maximum)	9.11	< 10 (severe)	Pass

Source: Processed research data (2026).

Data analysis was conducted using Structural Equation Modeling based on Partial Least Squares. The analysis included the evaluation of the measurement model through validity and reliability testing, followed by the assessment of the structural model to examine direct and moderating effects among variables.

Model estimation used the PLS-SEM path-weighting scheme (maximum 300 iterations; convergence tolerance  $1 \times 10^{-7}$ ). Statistical inference was obtained through bootstrapping with 5,000 subsamples to produce stable standard errors, t-statistics, p-values, and confidence intervals (Hair et al., 2017). To improve the robustness of the moderation estimates, the interaction terms (FI×EC, PB×EC, RA×EC) were constructed using residual-centering orthogonalization (Little, Bovaird, & Widaman, 2006; Henseler & Chin, 2010), which reduces multicollinearity between interaction terms and their main effects. The analysis proceeded in three stages—measurement-model evaluation, common-method-bias assessment, and structural-model evaluation—supplemented by block-level hierarchical regression as corroborating evidence.

## RESULT AND DISCUSSION

The Indonesian capital market has experienced remarkable growth over the last several years. According to data from the Indonesian Central Securities Depository (KSEI), the total number of investors (Single Investor Identification/SID) reached 20,347,147 by the end of December 2025. This figure represents a substantial increase compared to approximately 2.48

million investors recorded at the end of 2019. Such growth has been driven by the rapid digitalization of financial services and increasing public awareness of investment instruments. The expansion of digital technology has facilitated broader access to capital market products through online investment platforms, enabling individuals to participate in investment activities more easily and efficiently.

As presented in Table 2, male investors still dominate the Indonesian capital market, accounting for 63.44% of total investors. From an age perspective, younger generations, particularly Generation Z and Millennials, constitute the largest investor segment, with individuals aged 30 years and below representing 54.24% of total investors. This trend reflects the growing influence of digital natives who are generally more receptive to adopting online investment platforms and financial technologies.

**Table 2. Distribution of Individual Investors in the Indonesian Capital Market (KSEI, December 2025)**

Gender	(%)	Age (Years)	(%)	Occupation	(%)	Education	(%)	Income (IDR)	(%)
Male	63.44	≤ 30	54.24	Employee*	43.86	≤ High School	42.51	< 10 million	36.13
Female	36.56	31–40	24.90	Student	17.31	Bachelor's Degree	20.44	10–100 million	48.75
		41–50	12.32	Entrepreneur	16.24	Diploma	4.68	100–500 million	11.56
		51–60	5.67	Homemaker	4.92	Postgraduate	1.83	> 500 million	3.56
		> 60	2.87	Others	17.67	Others	30.54		

Source: KSEI (2025)

In terms of occupation, employees (including public servants, private-sector employees, and teachers) represent the largest investor group, accounting for 43.86% of the total investor population, followed by students at 17.31%. Regarding educational background, investors with a high school education or lower constitute the largest segment (42.51%), indicating that investment activities are no longer limited to highly educated individuals. Furthermore, most individual investors earn between IDR 10 million and IDR 100 million annually, representing 48.75% of total investors.

Investor participation has also expanded geographically, although Java remains the dominant region, accounting for 68.58% of total investors and 94.93% of total C-BEST assets. Nevertheless, participation from regions outside Java has shown significant growth, indicating increasing inclusiveness in the Indonesian capital market ecosystem.

Several factors have contributed to the increasing participation of Generation Z investors in the capital market. First, the availability of digital investment platforms has significantly reduced entry barriers by allowing individuals to open investment accounts with relatively small initial capital. Second, extensive financial literacy campaigns conducted by the Financial Services Authority (OJK), the Indonesia Stock Exchange (IDX), and securities firms have increased public awareness of investment opportunities. Third, changes in financial behavior following the COVID-19 pandemic have encouraged individuals to manage their finances more proactively and seek alternative income sources through investment activities.

Despite the substantial increase in investor participation, this growth must be accompanied by improvements in financial literacy and risk awareness. Many novice investors, particularly among Generation Z, enter the capital market with limited understanding of fundamental analysis, portfolio management, and risk management. According to the National Survey on Financial Literacy and Inclusion (SNLIK) conducted by OJK in 2022, Indonesia’s financial literacy index reached 49.68%, while the financial inclusion index was significantly higher at 85.10%. The gap of 35.42 percentage points indicates that a considerable proportion of individuals have access to financial products

without possessing sufficient financial knowledge. This discrepancy may be even more pronounced among Generation Z, whose access to digital investment platforms often precedes formal financial education. Therefore, investigating the determinants of risky investment decisions among Generation Z investors represents a highly relevant and important research endeavor.

Furthermore, from a geographical perspective, although approximately 68% of investors remain concentrated in Java, investor participation from Sumatra, Kalimantan, Sulawesi, and Eastern Indonesia has continued to increase. This trend suggests that Generation Z investor participation is geographically diverse rather than concentrated solely in major economic centers. Consequently, this study distributed its sample across six regions of Indonesia—Java, Sumatra, Kalimantan, Sulawesi, Bali–NTB–NTT, and Maluku–Papua—to obtain a more comprehensive representation of Generation Z investors in the Indonesian capital market.

### Respondent Profile

This study utilized primary data collected through an online questionnaire administered via Google Forms. The questionnaire was distributed through various channels, including investor WhatsApp groups, investor communities on social media platforms (Instagram, X/Twitter, and TikTok), online forums, and personal networks across six regions of Indonesia. After data screening and validation procedures, a total of 275 respondents met all research criteria and were included in the Structural Equation Modeling–Partial Least Squares (SEM-PLS) analysis.

The respondents were selected based on several criteria. Participants had to belong to Generation Z (born between 1997 and 2012, corresponding to ages 14–29 at the time of data collection), possess an active capital market investment account, actively utilize digital platforms for investment activities, and have experience investing in risky financial instruments such as stocks, equity mutual funds, exchange-traded funds (ETFs), corporate bonds, or derivatives. The sample size of 275 respondents exceeded the minimum recommendation proposed by Hair et al. (2017), who suggested that SEM-PLS studies with moderate model complexity should include at least 200 observations, while samples exceeding 250 observations generally improve estimation accuracy and stability.

**Table 3. Respondent Characteristics (N = 275)**

Characteristic	Category	Frequency	Percentage (%)
Gender	Female	161	58.55
	Male	114	41.45
Age	18–20 Years	36	13.09
	21–23 Years	48	17.45
	24–26 Years	108	39.27
	27–29 Years	83	30.18
Region	Kalimantan	78	28.36
	Sulawesi	76	27.64
	Java	63	22.91
	Sumatra	28	10.18
	Bali–NTB–NTT	22	8.00
	Maluku–Papua	8	2.91

Source: Processed Data (2026).

Based on Table 3, female respondents accounted for the majority of participants (58.55%), while male respondents represented 41.45%. This composition differs from the national investor profile reported by KSEI (2025), where male investors dominate. The finding suggests that Generation Z women are increasingly participating in capital market

activities, reflecting broader trends in women's financial empowerment facilitated by digital access and online financial education.

Most respondents were between 24 and 26 years old (39.27%), followed by those aged 27–29 years (30.18%) and 21–23 years (17.45%). Collectively, respondents aged 21–29 years represented 86.91% of the sample, indicating that the study primarily captured Generation Z individuals who are entering or already participating in the workforce and actively developing their investment portfolios.

The geographical distribution of respondents demonstrates strong representation across six Indonesian regions. Kalimantan contributed the largest proportion of respondents (28.36%), followed by Sulawesi (27.64%), Java (22.91%), Sumatra (10.18%), Bali–NTB–NTT (8.00%), and Maluku–Papua (2.91%). This distribution provides a broader perspective on investment behavior beyond the Java-centric composition typically observed in national investor statistics.

Regarding educational attainment, respondents were predominantly high school graduates (47.64%) and bachelor's degree holders (33.09%). This finding indicates that participation in capital market investment has expanded beyond highly educated groups and is increasingly accessible to individuals with diverse educational backgrounds.

Most respondents were unmarried (57.09%) and employed as entrepreneurs (40.00%) or private-sector employees (38.55%). In terms of income, more than half of the respondents (50.55%) reported monthly earnings between IDR 5 million and IDR 10 million, placing them within Indonesia’s middle-income segment. This financial position provides sufficient discretionary income for participation in risky investment activities.

With respect to investment experience, the majority of respondents had invested for four to six years (52.36%), followed by two to three years (37.82%). These findings indicate that respondents were not novice investors but rather individuals with adequate practical experience in making investment decisions. Furthermore, 78.91% of respondents financed their investments using income earned from employment or business activities, reflecting a relatively high degree of financial independence. A similarly large proportion regularly maintained financial records, suggesting a strong level of financial discipline among Generation Z investors in Indonesia.

This study examines the determinants of risky investment decisions among Generation Z investors in Indonesia. The variables investigated include Financial Literacy, Digital Literacy, Perceived Trust, Financial Influencer, Psychological Bias, Risk Attitude, and Economic Capability. The analysis was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach.

**Descriptive Statistics**

Table 4 presents the descriptive statistics of all research constructs. Overall, the respondents demonstrated very high levels across all variables, with mean scores ranging from 7.681 to 7.918 on a 10-point scale.

**Table 4. Descriptive Statistics of Research Constructs**

Construct	Indicators	Mean	SD	Category
Risky Investment Decision	4	7.723	1.918	Very High
Financial Literacy	11	7.899	1.976	Very High
Digital Literacy	6	7.704	2.180	Very High
Perceived Trust	3	7.681	2.140	Very High
Financial Influencer	3	7.800	2.047	Very High
Psychological Bias	12	7.918	1.931	Very High
Risk Attitude	12	7.855	2.018	Very High
Economic Capability	4	7.857	2.050	Very High

Source: Processed Research Data (2026).

The results indicate that Psychological Bias recorded the highest mean score ( $M = 7.918$ ), suggesting that behavioral tendencies such as overconfidence, herd behavior, and loss aversion remain dominant characteristics among Generation Z investors. Conversely, Perceived Trust obtained the lowest mean score ( $M = 7.681$ ), although it remained within the very high category. These findings imply that young investors in Indonesia possess strong cognitive, behavioral, and financial capabilities when participating in capital market activities.

### Measurement Model Evaluation

The measurement model was evaluated through convergent validity, discriminant validity, and reliability testing. Following the recommendations of Hair et al. (2019), all indicators with outer loading values above 0.50 were retained to preserve the conceptual coverage of multidimensional constructs.

**Table 5. Summary of Validity and Reliability Assessment**

Construct	AVE	Composite Reliability	Cronbach's Alpha
RID	0.497	0.797	0.662
FL	0.406	0.882	0.853
DL	0.581	0.893	0.856
PT	0.615	0.828	0.687
FI	0.607	0.822	0.675
PB	0.482	0.918	0.902
RA	0.504	0.924	0.910
EC	0.616	0.865	0.792

Source: Processed Research Data (2026).

All constructs achieved Composite Reliability values exceeding 0.70, indicating satisfactory internal consistency reliability (Hair et al., 2019). Three constructs returned AVE values marginally below 0.50 (financial literacy = 0.406; psychological bias = 0.482; risky investment decision = 0.497). A conservative indicator-retention strategy was applied: indicators were removed only when outer loadings fell below 0.40, with conditional removal considered only when AVE was far below threshold while preserving at least three indicators per construct (Hair et al., 2017). All 55 indicators loaded above 0.50, so none were eliminated. Retention is justified on three grounds: (a) loadings remained above the 0.50 minimum; (b) item deletion did not materially increase AVE; and (c) deletion would have narrowed the conceptual coverage of inherently multidimensional constructs financial literacy (knowledge, behavior, attitude), psychological bias (overconfidence, herding, loss aversion), and risky investment decision. Marginally sub-threshold AVE is an expected consequence of multidimensional constructs whose extracted variance is distributed across heterogeneous indicators; convergent validity remains acceptable when composite reliability exceeds 0.70 (Fornell & Larcker, 1981; Sarstedt et al., 2019). All constructs achieved composite reliability between 0.797 and 0.924.

Discriminant validity was examined using the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio (Henseler, Ringle, & Sarstedt, 2015). Several inter-construct correlations were high most notably between psychological bias and risk attitude ( $r = 0.892$ ) and between risk attitude and economic capability ( $r = 0.850$ ) and several HTMT values approached or exceeded conservative thresholds. Strong intercorrelation among behavioral determinants is common in behavioral-finance research, where investor traits are conceptually interdependent (Barberis & Thaler, 2003). This pattern has an important methodological implication: it confirms that the determinants operate as an integrated, coherent system rather than as fully independent factors, but it also induces multicollinearity

that can inflate the standard errors of individual paths. Predictor VIFs ranged from 3.92 to 9.11, with psychological bias (7.69) and risk attitude (9.11) in the moderate range yet below the severe threshold of 10. Accordingly, individual-path estimates for these constructs are interpreted with caution and triangulated against block-level evidence reported below.

### Structural Model Evaluation

The structural model demonstrated substantial explanatory power. The coefficient of determination ( $R^2$ ) for Risky Investment Decisions was 0.636, indicating that 63.6% of the variance in risky investment decisions can be explained by the proposed determinants.

**Table 6. Structural Model Evaluation**

Indicator	Value	Interpretation
$R^2$	0.636	Moderate to Substantial
Adjusted $R^2$	0.623	Moderate
$Q^2$	0.564	High Predictive Relevance
GoF	0.586	Strong

Source: Processed Research Data (2026).

The  $Q^2$  value of 0.564 confirms strong predictive relevance, while the Goodness-of-Fit value of 0.586 indicates that the model provides an excellent representation of the observed phenomenon (Tenenhaus et al., 2005).

**Tabel 7 Hierarchical Regression — Block-Level  $\Delta R^2$  (untuk R-18)**

Block (sequential)	$R^2$	$\Delta R^2$	F change	p change	Sig.
Block 1: Economic Capability (baseline)	0.532	0.532	310.828	< 0.001	***
Block 2: + Cognitive Capability (FL + DL)	0.610	0.078	27.068	< 0.001	***
Block 3: + External Influence (PT + FI)	0.615	0.004	1.551	0.214	n.s.
Block 4: + Psychological Behavior (PB + RA)	0.633	0.018	6.495	0.002	**
Block 5: + Moderation (3 interactions)	0.636	0.004	0.933	0.425	n.s.

Note: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; n.s. = not significant. Source: Processed research data (2026)

To corroborate the path estimates under multicollinearity, predictors were entered in theoretically ordered blocks. Economic capability alone (baseline) explained 53.2% of the variance ( $\Delta R^2 = 0.532$ ;  $F = 310.83$ ;  $p < 0.001$ ). The cognitive-capability block (financial and digital literacy) added significant incremental variance ( $\Delta R^2 = 0.078$ ;  $p < 0.001$ ), as did the psychological-behavior block (psychological bias and risk attitude;  $\Delta R^2 = 0.018$ ;  $p = 0.002$ ). In contrast, the external-influence block (perceived trust and financial influencer) was not significant ( $\Delta R^2 = 0.004$ ;  $p = 0.214$ ), and the moderation block (three interaction terms) was likewise not significant ( $\Delta R^2 = 0.004$ ;  $p = 0.425$ ). These block-level results identify which categories of determinants carry genuine incremental information and which do not, providing the basis for the triangulated hypothesis decisions.

### Hypothesis Testing and Discussion

Given the moderate multicollinearity among constructs, hypothesis decisions followed a triangulation rule rather than relying on individual paths alone. Each hypothesis was evaluated on two levels: (i) the significance of its individual bootstrap path, and (ii) the incremental contribution of the theoretical block containing it in a hierarchical regression. Decisions were classified as: Supported (significant individual path,  $p < 0.05$ ); Partially Supported (a non-significant individual path but a significant incremental block, indicating a determinant whose unique effect is obscured by multicollinearity rather than absent); and

Rejected (neither the individual path nor the block is significant). This rule avoids the common error of equating a non-significant individual path with the absence of a relationship.

**Table 8. Results of Hypothesis Testing**

Hypothesis	Structural Path	$\beta$	t-value	p-value	f <sup>2</sup>	Path-Level	Block-Level	Decision
H1	Financial Literacy → RID	0.192	1.973	0.049	0.026	Sig.	Sig.	Supported
H2	Digital Literacy → RID	-0.009	0.081	0.936	0.000	n.s.	Sig.	Partially Supported
H3	Perceived Trust → RID	0.032	0.296	0.767	0.001	n.s.	n.s.	Rejected
H4	Financial Influencer → RID	-0.017	0.198	0.843	0.000	n.s.	n.s.	Rejected
H5	Psychological Bias → RID	0.222	1.514	0.130	0.018	n.s.	Sig.	Partially Supported
H6	Risk Attitude → RID	0.217	1.322	0.186	0.014	n.s.	Sig.	Partially Supported
H7	EC × FI → RID	0.018	0.153	0.879	0.000	n.s.	n.s.	Rejected
H8	EC × PB → RID	-0.104	0.739	0.460	0.005	n.s.	n.s.	Rejected
H9	EC × RA → RID	0.132	0.860	0.390	0.008	n.s.	n.s.	Rejected

Note: critical t = 1.96 ( $\alpha = 5\%$ , two-tailed). Source: Processed Research Data (2026).

Financial Literacy was found to have a positive and significant influence on Risky Investment Decisions ( $\beta = 0.192$ ;  $p = 0.049$ ). This finding supports the Theory of Planned Behavior proposed by Ajzen (1991), which suggests that greater knowledge and understanding enhance individuals' confidence in making investment decisions. The result is also consistent with previous studies by Lusardi and Mitchell (2014), who found that financially literate individuals are more capable of evaluating risk-return trade-offs and making rational investment choices.

Digital Literacy did not exhibit a significant direct effect on risky investment decisions. However, the hierarchical regression analysis indicated that the cognitive capability block, consisting of Financial Literacy and Digital Literacy, significantly improved the explanatory power of the model. This suggests that Digital Literacy functions as a supporting capability that facilitates access to financial information and digital investment platforms rather than directly influencing investment decisions (Ng, 2012).

Perceived Trust and Financial Influencer variables were not found to significantly influence risky investment decisions. The non-significant effect of perceived trust ( $\beta = 0.032$ ;  $p = 0.767$ ; block n.s.) diverges from studies that found trust central to investment behavior (Adil et al., 2023; Belanche, Casaló, & Flavián, 2019). Three explanations are offered. First, in Indonesia's tightly regulated digital-investment ecosystem, platform trust has become a relatively homogeneous baseline (a hygiene factor) whose variance is insufficient to differentiate risk-taking. Second, perceived trust is highly correlated with financial influencer ( $r = 0.752$ ) and risk attitude ( $r = 0.811$ ), so its effect is absorbed by more proximal determinants. Third, most respondents are experienced investors (52.4% with 4–6 years); consistent with information-asymmetry theory (Akerlof, 1970), trust matters most at initial adoption under high uncertainty and recedes to a background condition as familiarity grows.

The non-significant, marginally negative effect of financial influencers ( $\beta = -0.017$ ;  $p = 0.843$ ; block n.s.) suggests that, for experienced Generation Z investors, exposure to influencer content does not directly increase risky decisions and may even prompt a critical stance, consistent with awareness of misinformation and undisclosed sponsorship. This nuances Social Cognitive Theory (Bandura, 1986): influencer effects appear

informational/educational rather than directive. The high correlations of financial influencer with digital literacy ( $r = 0.776$ ) and psychological bias ( $r = 0.828$ ) indicate that any influence likely operates indirectly—through literacy formation or reinforcement of biases—rather than as a direct path, an avenue for future mediation research.

Psychological bias ( $\beta = 0.222$ ) and risk attitude ( $\beta = 0.217$ ) showed the second- and third-largest path coefficients yet were individually non-significant ( $p = 0.130$  and  $0.186$ ). Their block, however, contributed significant incremental variance ( $\Delta R^2 = 0.018$ ;  $p = 0.002$ ). The non-significance of the individual paths reflects standard-error inflation from very high mutual correlation ( $r = 0.892$ ) and with economic capability ( $r = 0.823$ – $0.850$ ), with VIFs of 7.69 and 9.11. Conceptually, overconfidence (a bias component) and risk-seeking (a risk-attitude component) are two sides of the same risk-taking disposition. Their substantive relevance is evidenced by the strongest bivariate correlations with the outcome ( $r = 0.757$  and  $0.753$ ), large coefficients, and the significant psychological block—consistent with Prospect Theory (Kahneman & Tversky, 1979) and DOSPERT (Weber, Blais, & Betz, 2002). These constructs are therefore relevant determinants whose unique effects cannot be statistically isolated from one another, not factors without influence.

None of the three moderating effects of economic capability was significant (FI×EC  $\beta = 0.018$ ,  $p = 0.879$ ; PB×EC  $\beta = -0.104$ ,  $p = 0.460$ ; RA×EC  $\beta = 0.132$ ,  $p = 0.390$ ), and the moderation block was not significant ( $\Delta R^2 = 0.004$ ;  $p = 0.425$ ). The directions are nonetheless interpretable: economic capability tends to slightly strengthen the influencer effect (informational content is freely accessible regardless of wealth), tends to weaken the bias effect (a financial buffer may dampen panic- or euphoria-driven decisions), and tends to strengthen the risk-attitude effect (financial slack allows risk preferences to be enacted, consistent with the Permanent Income Hypothesis; Friedman, 1957). Crucially, economic capability explained 53.2% of baseline variance as a direct predictor, indicating that it functions as a dominant enabling antecedent rather than as a moderator.

A central conceptual implication concerns the role of economic capability. Although hypothesized as a moderator, the evidence indicates that it operates as a dominant direct antecedent: as a standalone baseline it explained 53.2% of the variance in risky investment decisions, while none of its interaction terms was significant. Economic capability is therefore better modeled as an enabling independent variable financial slack that permits risk-taking rather than as a boundary condition that alters the strength of other determinants. Future specifications could position economic capability as a direct predictor or as an antecedent whose effect is mediated by risk attitude and could test it as a control variable to isolate the behavioral paths.

Overall, financial literacy is the only determinant with a significant individual effect, while the cognitive-capability and psychological-behavior blocks are significant at the block level. Investment behavior thus appears to be shaped primarily by internal capability and disposition operating as an integrated, mutually correlated cluster rather than by external social influences, with the caveat that the unique effects of the behavioral constructs cannot be fully isolated under multicollinearity.

This study has several limitations that also indicate directions for future research. First, the cross-sectional design captures a single point in time and cannot establish causal dynamics; longitudinal designs are recommended. Second, the high intercorrelation among behavioral constructs (moderate multicollinearity) meant that some individual paths could not be isolated precisely and were supported only at the block level; future work could re-specify the model using higher-order constructs for example, combining psychological bias and risk attitude into a second-order behavioral-disposition construct to clarify unique paths. Third, all measures were self-reported; although Harman's test and a full-collinearity assessment indicate that common method bias is not a serious threat, a multi-method approach combining

actual transaction data with self-reports would strengthen validity. Fourth, respondents were recruited via non-probability online channels, so a conventional response rate and formal non-response-bias test could not be computed, and the regional distribution is not fully proportional to the national investor population; proportional stratified sampling and multi-group analysis are recommended. Fifth, macro-level factors (market conditions, interest rates, inflation) were outside the behavioral-finance scope and could be incorporated in future multi-level models.

## CONCLUSION

This study aimed to examine the determinants of risky investment decisions among Generation Z investors in Indonesia by integrating financial literacy, digital literacy, perceived trust, financial influencer exposure, psychological bias, risk attitude, and economic capability within a comprehensive behavioral finance framework. The findings demonstrate that financial literacy plays a central role in shaping risky investment decisions, indicating that investors with stronger financial knowledge and understanding are more capable of evaluating risk-return trade-offs and making informed investment choices. In addition, while only financial literacy exerts a significant individual effect, the cognitive-capability and psychological-behavior blocks contribute significant incremental explanatory power, indicating that these dimensions are relevant as integrated clusters even though their individual paths are constrained by multicollinearity, suggesting that investment decisions among Generation Z are influenced not only by rational considerations but also by behavioral and attitudinal factors.

The study further reveals that external influences, including perceived trust and financial influencers, do not directly determine risky investment decisions among the respondents. This indicates that Generation Z investors tend to rely more on their personal competencies and behavioral characteristics than on external sources when making investment decisions. Moreover, economic capability does not significantly strengthen the relationships between psychological factors and risky investment decisions, suggesting that financial capacity alone is insufficient to alter the underlying behavioral mechanisms that drive investment choices.

From a theoretical perspective, this study enriches the behavioral finance literature by demonstrating that risky investment decisions among Generation Z are better understood through the interaction of financial competence and psychological characteristics rather than through external influences alone. Methodologically, the integration of PLS-SEM and hierarchical regression analysis provides a more robust approach for assessing complex relationships among highly correlated behavioral constructs. From a practical standpoint, the findings highlight the importance of improving financial literacy and strengthening investors' decision-making capabilities to support more informed participation in capital markets. Consequently, this research contributes to the advancement of financial behavior studies and provides empirical evidence that can support the development of investor education programs and policies aimed at enhancing the quality of investment decision-making among young investors.

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