Ekonika : Jurnal Ekonomi Universitas Kadiri
Volume 11 No. 1 Tahun 2026

ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

Available at :

http://ojs.unik-kediri.ac.id/index.php/ekonika

Analyzing the Impact of Heuristic Biases on Investment Decisions Through Risk Tolerance: Evidence from Generation Z Investors in Indonesia

Stievanie[1], Liliana Inggrit Wijaya[2], Bertha Silvia Sutejo[3]
[1,2,3]Faculty of Business and Economics, University of Surabaya
Email : stievanie.20@gmail.com; liliana@staff.ubaya.ac.id*; bertha@staff.ubaya.ac.id.

Article History:
Submitted : 30 January 2026
Revised : 12 February 2026
Received : 29 March 2026

Keywords:
heuristic bias; overconfidence bias; availability bias; representativeness bias; risk tolerance; investment decision.

ABSTRACT

This study aims to examine the influence of heuristic biases, specifically overconfidence bias, availability bias, and representativeness bias on investment decisions among Generation Z investors in Indonesia, with risk tolerance serving as a mediating variable. The research replicates and extends previous models by incorporating representativeness bias into the framework. Using a quantitative approach, data were collected through an online questionnaire distributed to 208 respondents who met the specified sampling criteria. The data were analyzed using Structural Equation Modeling (SEM) with AMOS software. The results indicate that availability bias, representativeness bias, and risk tolerance have a significant positive effect on investment decisions, while overconfidence bias does not directly influence them. Additionally, overconfidence bias, availability bias, and representativeness bias significantly affect risk tolerance. The mediation analysis shows that risk tolerance mediates the relationship between availability bias and representativeness bias with investment decisions, but does not mediate the relationship between overconfidence bias and investment decisions. These findings highlight the significant role of cognitive biases and risk tolerance in shaping the investment behavior of Generation Z investors in Indonesia. The study contributes to behavioral finance literature by providing evidence on how psychological factors and cognitive tendencies influence financial decision making.

INTRODUCTION

Investment has become a popular phenomenon among Indonesian society, driven by the growing awareness of the importance of financial planning, the ease of access to various investment instruments, and the advancement of technology that enables individuals to invest more practically and efficiently. Investment can be defined as the allocation of funds by individuals or institutions with the aim of maintaining and increasing the value of assets (Pana & Ambarwati, 2023). Investment can be a one of the solution for individuals who are seeking

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

to achieve a more prosperous life in the future and to mitigate the impact of inflation on the value of their assets. (Adiyono et al., 2021)

Figure 1 presents data from PT Kustodian Sentral Efek Indonesia (KSEI), based on records from the Single Investor Identification (SID) system. As of January 2025, there were 15,161,166 active investors in Indonesia's capital market. This number is significantly higher than the number of investors in mutual funds and government securities (SBN), indicating that the capital market remains the primary investment choice among the public. Furthermore, the data show a consistent increase in the number of investors from 2021 to January 2025, reflecting the growing public awareness of the importance of investing to enhance and protect asset value against inflation.

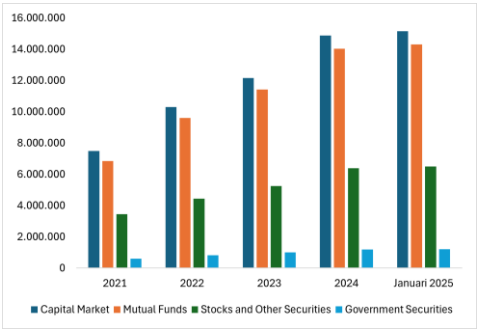


Figure 1. Number of Investors in Indonesia
Sumber : PT Kustodian Sentral Efek Indonesia (2025)

The majority of retail investors in Indonesia are dominated by Generation Z, or those aged 30 years and below. However for the purposes of this study, Generation Z is operationally limited to individuals aged 17–28 years to align with the research criteria. As of January 2025, Generation Z accounted for 54.71% of the total number of investors. Their close relationship with technology is one of the key factors driving the growing participation of Generation Z in investment activities (Aristantia & Lating, 2022). Figure 2 illustrates the demographic distribution of retail investors in Indonesia.

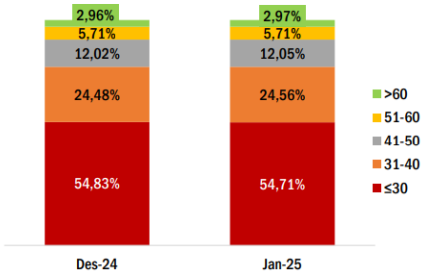


Figure 2. Number of Retail Investors in Indonesia
Source : PT Kustodian Sentral Efek Indonesia (2025)

In traditional financial theory, it is assumed that investors always act rationally when making financial decisions. This perspective is supported by the Efficient Market Hypothesis

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

(EMH), wherein Fama (1965) characterizes an efficient market as one composed of numerous rational investors who engage in competition to maximize returns. However, this assumption does not always align with real-world conditions, as the emergence of behavioral finance has highlighted systematic deviations from rational behavior proposed by traditional finance (Bihari et al., 2023). Behavioral finance explains that individuals often rely on heuristic shortcuts in their decision-making processes, which may lead to various cognitive biases (Barberis & Thaler, 2002; Tversky & Kahneman, 1974).

Several previous studies have examined the effect of heuristic biases on investment decision making (Ahmad & Shah, 2022; Irvansyah et al., 2024; Kasoga, 2021; Soraya et al., 2023; Sudirman et al., 2023; Yulianis & Sulistyowati, 2021). Sudirman et al. (2023) found that overconfidence bias and availability bias have a significant influence on investment decisions, while Soraya et al. (2023) showed that representativeness bias also affects investment decisions. Both studies used risk tolerance as a mediating variable between heuristic biases and investment decisions and found that risk tolerance mediates the relationship between heuristic biases and investors' investment decision-making.

The studies by Kasoga (2021) and Ahmad & Shah (2022) also support these findings, stating that investors influenced by heuristic biases tend to make suboptimal and irrational decisions, which negatively affect their portfolio performance. However, the study conducted by Irvansyah et al. (2024) found no relationship between overconfidence bias, availability bias, and representativeness bias and investors' investment decisions. These results contrast with the findings of previous studies.

Based on the findings of prior research, this study aims to replicate and extend the model proposed by Sudirman et al. (2023) by incorporating the representativeness bias variable as examined by Soraya et al. (2023). This research focuses on Generation Z investors in Indonesia to examine how overconfidence bias, availability bias, and representativeness bias influence investment decisions and risk tolerance directly, as well as their indirect effects on investment decision making through risk tolerance as a mediating variable.

LITERATURE REVIEW

Heuristic Bias

In complex and uncertain situations, individuals tend to use heuristics or practical rules as a quick way of thinking to simplify the decision-making process (Asbaruna, 2023; Masomi & Ghayekhloo, 2010). Heuristic bias can also be defined as the tendency of individuals to rely on simple or intuitive thinking patterns without conducting thorough and detailed evaluations when making decisions (Anggraini & Muzakir, 2024).

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

Risk Tolerance

Risk tolerance refers to the extent to which an individual is able to accept uncertainty in decision-making, which is crucial for investors as it affects the potential returns they may achieve (Widiastuti et al., 2024). According to Leon & Angie (2019), risk tolerance is the investors' ability to respond to and endure risks arising from investment activities. Risk tolerance also defined as the level of an investors' ability to accept and bear the risks arising from their investment activities (Yusuf, 2024).

Investment Decision

Investment decision refers to the activity of selecting where funds will be allocated, made by investors with the expectation of obtaining maximum returns while minimizing potential risks (Rahman & Gan, 2020). Investment decision is a process in which an investor selects one option among several available alternatives to be taken as an investment action (Marheni & Anmelrina, 2021). The main objective of investment decision-making is to achieve optimal returns while recognizing the existence of inherent risks (Togatorop & Susan, 2022).

The Effect of Overconfidence Bias on Investment Decision

Based on studies by Soraya et al. (2023), Sudirman et al. (2023), and Yulianis & Sulistyowati (2021) overconfidence bias has been found to have a significant positive effect on investment decisions. A high level of confidence often encourages investors to make investment decisions involving greater risks (Theressa & Armansyah, 2022). Several previous studies have also reported similar findings, confirming that overconfidence bias significantly and positively influences investment decisions (Adiputra, 2021; Firmansyah, 2023; Ramadhan & Sutrisno, 2022). Investors with a higher level of overconfidence tend to be more willing to take bold investment actions.

H1: Overconfidence bias has a positive effect on investment decisions.

The Effect of Availability Bias on Investment Decision

Availability bias leads investors to prioritize information or events that are easily recalled (Abhijith & Bijulal, 2024). According to Sudirman et al. (2023) availability bias has a significant positive influence on investment decisions. This bias enables investors to quickly recognize patterns or information perceived as relevant without conducting in-depth analysis, allowing them to make investment decisions more efficiently (Anwar et al., 2024). Research by Cuandra & Tan, (2021) Kurniana et al. (2023) Nizar & Daljono (2024) also supports the finding that availability bias positively affects investment decisions. Investors generally base their investment decisions on information that is most easily remembered or readily available.

H2: Availability bias has a positive effect on investment decisions.

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

The Effect of Representativeness Bias on Investment Decision

According to Soraya et al. (2023) representativeness bias has a significant positive effect on investment decisions. A company's good image and strong past performance tend to attract investors, leading them to place greater trust in the company (Maiziyah & Helmayunita, 2023). Similar findings have been reported by previous studies, indicating that representativeness bias positively influences investment decisions (I. Khan et al., 2020; Kurniana et al., 2023; Praditha et al., 2024) Representativeness bias drives investors to make quick decisions based on patterns or experiences from previous situations.

H3: Representativeness bias has a positive effect on investment decisions.

The Effect of Risk Tolerance on Investment Decision

Research by Sudirman et al. (2023) and Soraya et al. (2023) proves that there is a positive influence of risk tolerance on investment decisions. Investors with a high level of risk tolerance are generally willing to allocate a larger portion of their funds to high-risk investment instruments in the hope of obtaining proportional or even higher returns (Wardani & Lutfi, 2016). Several previous studies have also stated that risk tolerance has a positive effect on investment decisions (Afriani et al., 2023; Kasoga, 2021; Mahardhika & Restianto, 2023). Investors with high risk tolerance tend to be more courageous and prepared to face potential losses that may arise from their investment decisions.

H4: Risk tolerance has a positive effect on investment decisions.

The Effect of Overconfidence Bias on Risk Tolerance

In studies conducted by Sudirman et al. (2023) and Soraya et al. (2023), it was found that overconfidence bias has a positive influence on risk tolerance. Investors who feel overly confident even beyond their actual financial understanding, tend to take greater risks in their financial decisions (Samanez-Larkin et al., 2020). Previous studies such as Yuliani & Nurwulandari (2023) and Rani et al. (2024) also found similar results, stating that overconfidence bias positively affects risk tolerance. When investors possess a high level of confidence, it often encourages them to make investment decisions involving greater risks.

H5: Overconfidence bias has a positive effect on risk tolerance.

The Effect of Availability Bias on Risk Tolerance

Research by Sudirman et al. (2023) found that availability bias has a positive effect on risk tolerance. Information that are more prominent and easily recalled make investors feel more confident in taking financial risks (Srivastava et al., 2024). Similar findings were reported by Kasoga (2021) and (Bergh-Lindeque et al., 2021), who found that availability bias positively

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

affects risk tolerance. Easily accessible and memorable information makes investors feel more secure when taking risks.

H6: Availability bias has a positive effect on risk tolerance.

The Effect of Representativeness Bias on Risk Tolerance

Based on research by Soraya et al. (2023), representativeness bias has been proven to have a positive effect on risk tolerance. Representativeness bias leads investors to make riskier investment decisions by relying on perceived patterns or similarities they believe to be accurate (Kasoga, 2021). Previous studies, such as Srivastava et al. (2024) also found a positive influence on risk tolerance. Investors tend to feel more confident in making risky investment decisions based on their past experiences.

H7: Representativeness bias has a positive effect on risk tolerance.

The Mediating Role of Risk Tolerance in the Relationship Between Overconfidence Bias and Investment Decision

Based on research by Sudirman et al. (2023) and Soraya et al. (2023), there is evidence that overconfidence bias positively affects investment decisions mediated by risk tolerance. When investors have a high level of risk tolerance, they tend to show excessive confidence and are more likely to be affected by heuristic biases in their decision-making process (Kasoga, 2021). Previous studies have also found a similar relationship, showing that overconfidence bias affects investment decisions through risk tolerance as a mediating variable (Putri et al., 2024; Safitri et al., 2023; Sihombing & Prameswary, 2023). A higher level of investor confidence is generally followed by increased risk tolerance, which encourages them to make bolder investment decisions.

H8: Risk tolerance positively mediates the relationship between overconfidence bias and investment decision.

The Mediating Role of Risk Tolerance in the Relationship Between Availability Bias and Investment Decision

The study by Sudirman et al. (2023) found that availability bias positively affects investment decisions through risk tolerance as a mediating variable. Easy access to information is one of the factors that influences investors in making decisions, including those involving high-risk investments (Srivastava et al., 2024). Several other researchers, such as Salman et al. (2021) and Kasoga (2021), also stated that availability bias influences investment decisions through risk tolerance as a mediator. Easily accessible and memorable information increases investors' confidence in taking risks, which in turn encourages them to make quicker and bolder investment decisions, even when those investments are risky.

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

H9: Risk tolerance positively mediates the relationship between availability bias and investment decision.

The Mediating Role of Risk Tolerance in the Relationship Between Representativeness Bias and Investment Decision.

According to Soraya et al. (2023), representativeness bias positively affects investment decisions through risk tolerance as a mediating variable. Investors affected by representativeness bias tend to take higher risks because they believe that past stock trends can be used as a guide for future investment decisions (Srivastava et al., 2024). Other studies have also supported this finding, indicating that representativeness bias affects investment decisions through risk tolerance as a mediator (Safitri et al., 2023; Sihombing & Prameswary, 2023). Investors become more prepared to face potential risks in their investment decisions due to their confidence built from past information and experiences.

H10: Risk tolerance positively mediates the relationship between representativeness bias and investment decision.

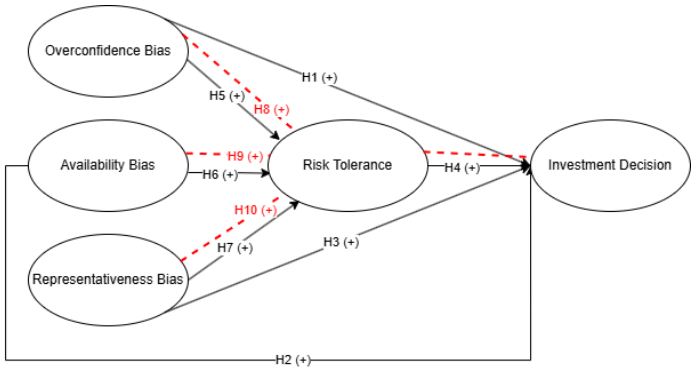


Figure 3. Research Framework Model.

METHODS

This research model is a replication of the study conducted by Sudirman et al. (2023), with the addition of the representativeness bias variable adopted from Soraya et al. (2023). Thus, this study includes three independent variables (overconfidence bias, availability bias, and representativeness bias), one dependent variable (investment decision), and one mediating variable (risk tolerance). This framework aims to provide a clearer understanding of how different heuristic biases affect investors' decision making and highlights the role of risk tolerance in mediating these relationships.

The investment decision variable was measured using seven indicators adopted from Khan et al. (2017). The overconfidence bias variable was measured using six indicators adopted from Baker et al. (2018). Availability bias was measured with three indicators from Jain et al. (2019). The representativeness bias variable was measured using six indicators

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

adopted from Rasheed et al. (2018) and risk tolerance was measured using four indicators adopted from Sudirman et al. (2023). All items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

The population of this study consists of individual investors in Indonesia who invest in capital market instruments listed on the Indonesia Stock Exchange (IDX). The sampling technique used was purposive sampling, which involves selecting respondents based on specific criteria relevant to the research objectives (Santina et al., 2021). The sample criteria were as follows: 1) Indonesian citizens (WNI), 2) Aged between 17 and 28 years old, 3) Having a minimum of six months of investment experience in the capital market with stock listed on the Indonesia Stock Exchange (IDX).

According to Hair et al. (2010) the minimum sample size should be at least five times the total number of indicators. Since this study involved 26 indicators, the minimum required sample size was 130 respondents. Data were collected through an online questionnaire distributed via Google Form, with a total of 215 responses received. Prior to analysis, data screening was conducted primarily to ensure that respondents met the research criteria. Based on the screening results, seven responses were excluded as they did not meet the established criteria. The data were analyzed using Structural Equation Modeling (SEM) with the assistance of AMOS software.

RESULTS AND DISCUSSION

Table. 1 Respondent Demographics

Category	Criteria	Frequency	Percentage
Gender	Male	113	54%
	Female	95	46%
Age	17-20 years old	45	22%
	21-25 years old	156	75%
	26-28 years old	7	3%
Latest Education Level	Middle School/equivalent	11	5%
	Senior High School/ equivalent	146	70%
	Bachelor degree	49	24%
	Master degree/higher	2	1%
Monthly Income Level	< Rp2.000.000	94	45%
	Rp2.000.000 - Rp5.000.000	86	41%
	Rp5.000.000 - Rp10.000.000	18	9%
	> Rp10.000.000	10	5%
Investment Experience	< 1 year	119	57%
	1 - 5 years	86	41%
	> 5 years	3	2%
Investment Time Orientation	Long-term	158	76%
	Short-term	50	24%

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

Table 1 shows the demographic characteristics of the 208 respondents in this study. Based on gender 113 respondents (54%) were male and 95 respondents (46%) were female, indicating that male respondents were slightly more dominant than female respondents. In terms of age, the majority of respondents were between 21 and 25 years old, totaling 156 individuals (75%). Respondents aged 17–20 years accounted for 45 individuals (22%), while those aged 26–28 years represented only 7 individuals (3%). Regarding the latest education level most respondents held a high school or equivalent education totaling 146 individuals (70%), followed by those with a bachelor degree at 49 individuals (24%), middle school or equivalent at 11 individuals (5%), and a master degree or higher at 2 individuals (1%).

Based on monthly income level, 94 respondents (45%) earned less than Rp2,000,000, while 86 respondents (41%) had an income between Rp2,000,000 and Rp5,000,000. 18 respondents (9%) earned between Rp5,000,000 and Rp10,000,000, and only 10 respondents (5%) earned more than Rp10,000,000. These findings indicate that most respondents belong to the lower to middle income group. In terms of investment experience, 119 respondents (57%) had less than one year of investment experience, 86 respondents (41%) had between one and five years of experience, and only 3 respondents (2%) had more than five years of experience. Finally, regarding investment time orientation, 158 respondents (76%) preferred long-term investments, while 50 respondents (24%) focused on short-term investments.

Tabel 2. Descriptive Statistics

Variable	Mean	Std. Deviation
Overconfidence Bias	21,462	5,800
Availability Bias	12,197	2,329
Representativeness Bias	24,942	3,689
Risk Tolerance	16,447	2,840
Investment Decision	28,375	4,987

Source: SPSS Data Processing Results

Table 2 shows the results of the descriptive analysis for each research variable, including the mean and standard deviation. Based on the calculations the overconfidence bias variable has a mean value of 21,462 with a standard deviation of 5,800. The availability bias variable has a mean of 12,197 with a standard deviation of 2,329. The representativeness bias variable shows the highest mean among the variables, at 24.942 with a standard deviation of 3,689. The risk tolerance variable has a mean of 16,447 with a standard deviation of 2,840. The investment decision variable shows a mean value of 28,375 with a standard deviation of 4,987.

In this study, validity and reliability tests need to be conducted. The validity test aims to assess the extent to which each statement can accurately represent the variable and align

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

with the concept being measured (Hair et al., 2014). An instrument is considered valid if each indicator has a standardized loading factor (SLF) ≥ 0,5 and an average variance extracted (AVE) ≥ 0,5. Meanwhile, for the reliability test the data are considered reliable if the construct reliability value is ≥ 0,6.

Table 3. Results of Validity and Reliability Tests.

Variable	Item Code	SLF	AVE	CR
Investment Decision Making	IDM1	0,784	0,557	0,898
	IDM2	0,737		
	IDM3	0,715		
	IDM4	0,803		
	IDM5	0,774		
	IDM6	0,723		
	IDM7	0,679		
Overconfidence Bias	OB1	0,866	0,704	0,935
	OB2	0,858		
	OB3	0,797		
	OB4	0,816		
	OB5	0,873		
	OB6	0,823		
Availability Bias	AB1	0,817	0,641	0,843
	AB2	0,751		
	AB3	0,832		
Representativeness Bias	RB1	0,722	0,525	0,869
	RB2	0,716		
	RB3	0,760		
	RB4	0,712		
	RB5	0,694		
	RB6	0,743		
Risk Tolerance	RT1	0,718	0,517	0,811
	RT2	0,719		
	RT3	0,712		
	RT4	0,728		

Source: SPSS AMOS Analysis Results

Referring to the results in Table 3, all indicators for each variable have a standardized loading factor (SLF) greater than 0,5 and an average variance extracted (AVE) above 0,5. These findings indicate that all indicators for the variables of investment decision making, overconfidence bias, availability bias, representativeness bias, and risk tolerance meet the requirements for construct validity. In addition, the composite reliability (CR) values for all variables also exceed the minimum threshold of 0,6, indicating that each construct can be considered reliable. Therefore all indicators in this study are deemed appropriate and capable of accurately representing the measured variables. After the validity and reliability tests are

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

satisfied, the next step is the evaluation of the structural model through the goodness of fit test to assess how well a statistical model fits the observed sample data (Hair et al., 2014).

Table 4. Results of the Goodness of Fit Test.

Model Fit Indicator	Cut-off Value	Result	Description
Chi-square	Expected to be small	400,085	Marginal Fit
RMSEA	≤ 0,08	0,046	Good Fit
GFI	≥ 0,9	0,872	Marginal Fit
TLI	≥ 0,9	0,956	Good Fit
CFI	≥ 0,9	0,963	Good Fit
NFI	≥ 0,9	0,889	Marginal Fit
CMIN/DF	≤ 2	1,444	Good Fit
PNFI	The higher, the better fit	0,758	Good Fit

Source: SPSS AMOS Analysis Results

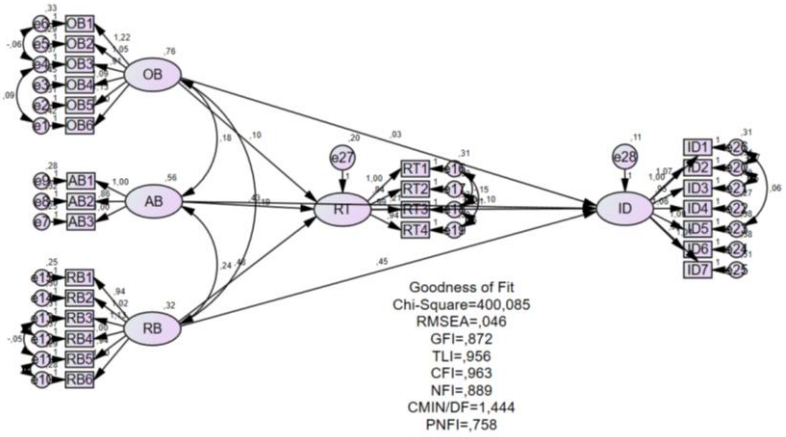


Figure 2. Structural Model
Source: SPSS AMOS Analysis Results

Based on Table 4, the results of the goodness of fit test indicate that several indicators meet the criteria for model fit, including RMSEA, TLI, CFI, CMIN/DF, and PNFI, which is classified as good fit. Meanwhile, the Chi-square, GFI, and NFI are classified as marginal fit category. According to Hair et al. (2014). a research model must meet at least three to four goodness of fit indicators to be considered suitable for further analysis. Therefore, the research model is considered to meet the fit criteria and can be used in the next step, which is hypothesis testing.

Tabel 5. Results of Direct Effect Test.

Hypothesis	Effect	Estimate	CR	P-Value	Description
H1	Overconfidence Bias → Investment Decision	0,026	0,669	0,504	Not Supported
H2	Availability Bias → Investment Decision	0,213	2,984	0,003	Supported
H3	Representativeness Bias → Investment Decision	0,453	4,650	***	Supported

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

H4	Risk Tolerance → Investment Decision	0,309	3,422	***	Supported
H5	Overconfidence Bias → Risk Tolerance	0,103	2,109	0,035	Supported
H6	Availability Bias → Risk Tolerance	0,426	5,429	***	Supported
H7	Representativenes Bias → Risk Tolerance	0,477	4,566	***	Supported

Source: SPSS AMOS Analysis Results

Table 5 shows the results of the direct effect test among the research variables. Out of the seven hypotheses tested, six hypotheses (H2, H3, H4, H5, H6, H7) were accepted, as they had CR values ≥ 1,96 and p-values ≤ 0,05, while one hypothesis (H1) was rejected due to a CR ≤ 1,96 and a p-value ≥ 0,05. These results indicate that availability bias, representativeness bias, and risk tolerance have a positive effect on investment decisions, whereas overconfidence bias, availability bias, and representativeness bias positively influence risk tolerance. Meanwhile, overconfidence bias was not proven to have a direct effect on investment decisions.

Table 6. Results of the Indirect Effect Test

Hypothesis	Effect	T-Value	T-Table	Description
H8	Overconfidence Bias → Risk Tolerance → Investment Decision	1,793	1,972	Not Supported
H9	Availability Bias → Risk Tolerance → Investment Decision	2,907	1,972	Supported
H10	Representativeness Bias → Risk Tolerance → Investment Decision	2,739	1,972	Supported

Source: Calculated Using Excel

Table 6 shows the results of the indirect effect (mediation) test. In this test, the Sobel test was used to measure the indirect effect between the independent and dependent variables through a mediating variable (Indahsari & Asyik, 2021). The Sobel test can be calculated using the following formula:

$$z = \frac{ab}{\sqrt{(a^2\ x\ SEb^2\ ) + (b^2\ x\ SEa^2\ )}}$$

a = regression coefficient of the independent variable on the mediating variable

b = regression coefficient of the mediating variable on the dependent variable

SEa = standard error of the effect of the independent variable on the mediating variable

SEb = standard error of the effect of the mediating variable on the dependent variable

Based on the test results in table 6, it was found that only two hypotheses (H9 & H10) were accepted, with T-values of 2,907 and 2,739, respectively, which are greater than the critical T-table (1,972), and thus both were accepted. These results indicate that risk tolerance

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

is able to mediate the effects of availability bias and representativeness bias on investment decisions. Meanwhile, hypothesis H8 had a T-value of 1,793, which is lower than 1,972, and therefore H8 was rejected, indicating that risk tolerance does not mediate the relationship between overconfidence bias and investment decisions.

Based on the hypothesis test results, overconfidence bias was found to have no effect on investment decisions. This finding is not consistent with the studies conducted by Soraya et al. (2023) and Yulianis & Sulistyowati (2021) which reported a positive influence of overconfidence bias on investment decisions. However, it aligns with the findings of Irvansyah et al. (2024), who also found that overconfidence bias does not affect investment decisions. Overconfidence in investors does not necessarily influence how they make investment choices, as they may have their own perspectives (Fajri & Setiawati, 2023). Pratiwi & Leon (2019) also reported that investors often rely more on general information rather than their own analysis, so overconfidence does not appear to significantly impact their investment decisions. Most respondents in this study were novice investors who lacked sufficient experience in managing confidence when making financial decisions, leading them to feel assured in their knowledge while still depending on external opinions or market trends when selecting investments.

The results of the hypothesis test indicate that availability bias has a significant positive effect on investment decisions. This finding is consistent with the results of studies conducted by Kasoga (2021), Nizar & Daljono (2024), Kurniana et al. (2023), and Cuandra & Tan (2021). This phenomenon suggests that investors tend to make investment decisions based on information that is easily recalled or recently obtained, rather than on the relevance or significance of the information (Jain et al., 2019). According to Cuandra & Tan (2021), investors are more likely to purchase stocks or invest using information they already possess, as it is considered more familiar and convincing. Generation Z, who have easy access to a wide range of information through social media and digital platforms, tend to rely more on information that is familiar or popular among their friends and family, so their investment decisions are often influenced by the familiarity of the information.

Representativeness bias was found to have a significant positive effect on investment decisions, which is consistent with previous studies conducted by Soraya et al. (2023) and (Praditha et al., 2024). Investors often conclude that past performance reflects future outcomes and tend to evaluate only observable characteristics (Adiputra, 2021). Similarly, Khan et al. (2020) found that investors are likely to believe that stocks with consistently increasing past performance or profits will yield the same results in the future, leading them to make irrational investment decisions. Generation Z often relies on past investment experiences or success

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

trends in the past that observed on social media or digital platforms as a basis for decision-making, making them more susceptible to the belief that such profit patterns will repeat.

The hypothesis test results indicate that risk tolerance has a significant positive effect on investment decisions. This finding supports the studies conducted by Soraya et al. (2023), Afriani et al. (2023) Kasoga (2021), and Mahardhika & Restianto (2023). Investors with a high level of risk tolerance tend to be more prepared and confident in making investment decisions, as they understand the potential risks involved and believe in the potential returns they can achieve (Yuliani & Nurwulandari, 2023). Generation Z with a high level of risk tolerance encourages them to make bolder investment decisions, as they expect to obtain higher returns as well.

Overconfidence bias was found to have a significant positive effect on risk tolerance, which aligns with the findings of Yuliani & Nurwulandari (2023) and Rani et al. (2024). Investors who are overly confident tend to underestimate risk and tend to make high-risk decisions (Ahmad & Shah, 2022). Those with overconfidence in their knowledge tend to believe they have a broader understanding than they actually do (Sihombing & Prameswary, 2023). Generation Z used to having easy access to information through digital platforms, Generation Z tends to overestimate their analytical abilities, which increases their risk tolerance and encourages more aggressive investment decisions.

Based on the hypothesis test results, availability bias was found to have a significant positive effect on risk tolerance. This finding aligns with the studies conducted Sudirman et al. (2023) and Bergh-Lindeque et al. (2021). Availability bias can enhance investors' financial risk tolerance by emphasizing and making it easier for them to recall previous investment successes, thereby increasing their confidence in making risky decisions (Srivastava et al., 2024). Among Generation Z, this is evident in their tendency to follow popular investments on social media, as they are easily influenced by notable success stories, which in turn increases their willingness to take investment risks.

Representativeness bias was found to have a significant positive effect on risk tolerance, which is consistent with the findings of Soraya et al. (2023) and Srivastava et al. (2024). Representativeness bias leads investors to become more aggressive in taking risks, as they tend to tolerate higher levels of risk due to the belief that historical stock patterns can serve as a basis for predicting future performance (Srivastava et al., 2024). Generation Z tends to follow stocks that have been profitable or popular on social media, making them more comfortable taking risks because they believe these stocks have the potential to yield profits again.

The mediation test results indicate that risk tolerance does not mediate the effect of overconfidence bias on investment decisions. This finding is not consistent with the studies

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

conducted by Sudirman et al. (2023), Sihombing & Prameswary (2023), and Safitri et al. (2023). However, it aligns with Wahyu & Firmialy (2024) who also found that risk tolerance does not mediate the relationship between overconfidence bias and investment decisions. Generation Z tends to be influenced by other factors, such as social media trends, rapid information dissemination, and the popularity of investment instruments, so risk tolerance does not serve as a mediator in the relationship between overconfidence bias and investment decisions.

The mediation test results indicate that risk tolerance positively mediates the effect of availability bias on investment decisions. This finding is consistent with the studies conducted by Sudirman et al. (2023) and Kasoga (2021). The higher the level of risk tolerance, the more likely investors are influenced by availability bias, as accessible information encourages them to take greater risks in their investment decisions (Salman et al., 2021). As a result Generation Z shows greater confidence and a sense of security when taking investment risks, particularly when information about investment successes is readily available on social media or digital platforms. Their familiarity with such information increases their risk tolerance, which in turn motivates them to make bolder investment decisions.

Risk tolerance was also found positively mediates the effect of representativeness bias on investment decisions, which is consistent with the findings of Soraya et al. (2023), Safitri et al. (2023), Srivastava et al. (2024) and Sihombing & Prameswary (2023). Investors influenced by representativeness bias tend to believe that past patterns or performance will be repeated in the future, this belief increases their risk tolerance and encourages bolder investment decisions Kasoga (2021). Generation Z who can easily access information on past investment performance or trends in the past through social media and digital platforms, feel more confident in the potential outcomes of their investments, which further enhances their risk tolerance and willingness to make more aggressive investment decisions.

CONCLUSION

Based on the analysis and discussion, this study concludes that cognitive biases and risk tolerance play an important role in the investment decision making process of Generation Z in Indonesia. Specifically, availability bias and representativeness bias were found to have a significant and positive direct effect on investment decisions, while overconfidence bias had no direct effect. . The findings also confirm that in the context of Generation Z investors in Indonesia, cognitive biases such as overconfidence, representativeness, and availability bias have a significant impact on risk tolerance

Furthermore, the findings reveal that risk tolerance mediates the effect of availability bias and representativeness bias on investment decisions. However, risk tolerance was not found to mediate the relationship between overconfidence bias and investment decisions. For

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

investors, understanding the presence of these biases is not only important for recognizing their own thought patterns and behavioral tendencies, but also for reducing the potential for impulsive or irrational decision making. With this awareness, investors can adopt a more careful approach when evaluating market information, evaluating risks, and selecting investment strategies that align with their financial goals. Future research is expected to explore other cognitive biases to improve the accuracy of findings and to identify additional factors that influence investment decision making.

BIBLIOGRAPHY

Abhijith, R., & Bijulal, D. (2024). Heuristic biases influencing individual stock investment decisions: a hybrid fuzzy DELPHI-AHP-DEMATEL approach. *Journal of Advances in Management Research*, *21*(4), 627–648. https://doi.org/10.1108/JAMR-03-2024-0093

Adiputra, I. G. (2021). The Influence of Overconfidence, Representative Bias, and Risk Tolerance in Investment Decision Making: Evidence on Stock Investors in Indonesia. *Journal of Hunan University（Natural Sciences）*, *48*(4), 196–205.

Adiyono, M., Suryaputri, R. V., Efan, E., & Kumala, H. (2021). Analisis Alternatif Pilihan Investasi Pada Era Digitalisasi. *Jurnal Akuntansi Trisakti*, *8*(2), 227–248. https://doi.org/10.25105/jat.v8i2.9678

Afriani, S. W. D., Isnurhadi, I., & Yuliani, Y. (2023). Pengaruh Literasi Keuangan Dan Risk Tolerance Terhadap Keputusan Investasi. *J-MACC : Journal of Management and Accounting*, *6*(2), 175–185. https://doi.org/10.52166/j-macc.v6i2.4906

Ahmad, M., & Shah, S. Z. A. (2022). Overconfidence heuristic-driven bias in investment decision-making and performance: mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Sciences*, *38*(1), 60–90. https://doi.org/10.1108/JEAS-07-2020-0116

Anggraini, D., & Muzakir, M. (2024). Pengaruh Bias Heuristic Terhadap Keputusan Investasi Nasabah Bank Aceh Syariah Capem Lapang Meulaboh. *Jurnal Sains Riset*, *14*(1), 50–61. https://doi.org/10.47647/jsr.v14i1.2109

Anwar, R. M., Wijaya, H., & Amelinda, R. (2024). Peran bias perilaku investor dalam proses pengambilan keputusan dan kinerja investasi Perilaku Investor. *Journal of Business and Banking*, *14*(1), 39–57. https://doi.org/10.14414/jbb.v14i1.4618

Aristantia, S. E., & Lating, A. I. S. (2022). Edukasi dan Pendampingan Alternatif Investasi Generasi Z Sebagai Future Investor. *JANKA: Jurnal Pengabdian Masyarakat*, *1*(2), 54–62.

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
Jurnal Ekonika vol 11 (1) 2026 ISSN (*Print*) 2502-9304

Baker, H. K., Kumar, S., & Goyal, N. (2018). Personality traits and investor sentiment. *Review of Behavioral Finance*, *13*(4), 354–369. https://doi.org/10.1108/RBF-08-2017-0077

Barberis, N., & Thaler, R. (2002). Working Paper Series a Survey of Behavioral Finance. *NBER Working Paper Series*, 2–67. http://www.nber.org/papers/w9222

Bergh-Lindeque, A. van den, Ferreira-Schenk, S., & Dickason-Koekemoer, Z. (2021). Individual Investor Risk Tolerance From a Behavioural Finance Perspective in Gauteng, South Africa. *International Journal of Economics and Financial Issues*, *11*(4), 53–65. https://doi.org/10.32479/ijefi.11451

Bihari, A., Dash, M., Muduli, K., Kumar, A., Mulat-Weldemeskel, E., & Luthra, S. (2023). Does cognitive biased knowledge influence investor decisions? An empirical investigation using machine learning and artificial neural network. *VINE Journal of Information and Knowledge Management Systems*, 445–469. https://doi.org/10.1108/VJIKMS-08-2022-0253

Cuandra, F., & Tan, H. (2021). Analysis of Factors That Are Considered By Investors in Stocks Investment Decision Making in Batam City. *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi).*, *8*(1), 1–31. https://doi.org/10.35794/jmbi.v8i1.33266

Fajri, A., & Setiawati, E. (2023). The Influence of Over Confidence, Illusion of Control, Availability, Anchoring Bias and Financial Literacy on Investment Decision Making in the Community of Demak District As Beginning Investors. *The International Journal of Business Management and Technology*, *7*(4), 187–198. https://doi.org/10.1016/j.frl.2020.101880%0Ahttp://journal.unilak.ac.id/index.php/JIEB/article/view/3845%0Ahttp://dspace.uc.ac.id/handle/123456789/1288%0Ahttp://e-journal.president.ac.id/presunivojs/index.php/FIRM-JOURNAL/article/view/3899/1336#%0Ahttp://

Fama, E. F. 10/Downloads/citations-20240527T021714. ri. (1965). Random walks in stock-market prices (University of Chicago. Graduate School of Business Selected papers). *University of Chicago. Graduate School of Business*, *16*.

Firmansyah, F. (2023). The Influence of Overconfidence Bias, Herding Effect, and Loss Aversion on Investment Decisions in The Capital Market with Financial Literacy as A Moderating Variable. *Journal of Business and Management Review*, *4*(11), 871–897. https://doi.org/10.47153/jbmr411.8252023

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis*

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

(Seventh Ed). Pearson Education Limited.

Indahsari, P., & Asyik, N. F. (2021). Pengaruh Kinerja Keuangan terhadap Nilai Perusahaan melalui Kebijakan Dividen. *Jurnal Ilmu Dan Riset Akuntansi*, *10*(5), 1–25.

Irvansyah, D., Murhadi, W. R., & Mahadwartha, P. A. (2024). The Effect of Overconfidence , Representative , Anchoring , and Availability Biases on Investment Decisions and Market Efficiency. *MATRIK: JURNAL MANAJEMEN, STRATEGI BISNIS, DAN KEWIRAUSAHAAN*, 125–136.

Jain, J., Walia, N., & Gupta, S. (2019). Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance*, *12*(3), 297–314. https://doi.org/10.1108/RBF-03-2019-0044

Jr Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analaysis*.

Kasoga, P. S. (2021). Heuristic biases and investment decisions: multiple mediation mechanisms of risk tolerance and financial literacy—a survey at the Tanzania stock market. *Journal of Money and Business*, *1*(2), 102–116. https://doi.org/10.1108/jmb-10-2021-0037

Khan, H. H., Naz, I., Qureshi, F., & Ghafoor, A. (2017). Heuristics and stock buying decision: Evidence from Malaysian and Pakistani stock markets. *Borsa Istanbul Review*, *17*(2), 97–110. https://doi.org/10.1016/j.bir.2016.12.002

Khan, I., Afeef, M., Jan, S., & Ihsan, A. (2020). The impact of heuristic biases on investors' investment decision in Pakistan stock market: moderating role of long term orientation. *Qualitative Research in Financial Markets*, *13*(2), 252–274. https://doi.org/10.1108/QRFM-03-2020-0028

Kurniana, Haymans Manurung, A., & Sembel, R. (2023). The Effect of Availability Bias and Representativeness Bias on Investment Decisions Among Millennials and Gen Z in Indonesia. *Tekmapro*, *18*(2), 47–58. https://doi.org/10.33005/tekmapro.v18i2.337

Leon, F. M., & Angie, A. (2019). Factors Affecting Financial Risk Tolerance on Young Investors in Indonesia. *Indonesian Management and Accounting Research*, *18*(1), 48–61. https://doi.org/10.25105/imar.v18i1.5385

Mahardhika, A. S., & Restianto, Y. E. (2023). Memahami Toleransi Risiko Finansial di Kalangan Investor Muda. *Owner*, *7*(4), 3164–3174. https://doi.org/10.33395/owner.v7i4.1686

Maiziyah, A. R., & Helmayunita, N. (2023). Representativeness Bia. *Jurnal Nuansa Karya*

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

Akuntansi, *1*(3), 261–273.

Marheni, D. K., & Anmelrina. (2021). Faktor-Faktor yang Mempengaruhi Investment Decision pada Investasi Properti di Kota Batam. *Sketsa Bisnis*, *8*(1), 19–33. https://doi.org/10.35891/jsb.v8i1.2301

Nizar, M., & Daljono, D. (2024). the Impact of Availability Bias and Representative Bias on Investment Decisions and Performance: the Role of Fomo As an Intervening Variable. *Jurnal Apresiasi Ekonomi*, *12*(1), 71–89. https://doi.org/10.31846/jae.v12i1.730

Pana, V., & Ambarwati, L. (2023). Pengaruh Ekspektasi Return dan Literasi Keuangan Terhadap Minat Berinvestasi Emas pada Mahasiswa STIE Widya Wiwaha. *Jurnal Akuntansi Dan Keuangan*, *11*(2), 176. https://doi.org/10.29103/jak.v11i2.12193

Praditha, R., Bahtiar, B., & Razak, L. A. (2024). Peran Pengalaman sebagai Pereduksi Bias Heuristik dan Herding Effect dalam Keputusan Investasi. *Reviu Akuntansi Dan Bisnis Indonesia*, *8*(2), 171–184. https://doi.org/10.18196/rabin.v8i2.21477

Pratiwi, R. R., & Leon, F. M. (2019). the Impact of Overconfidence and Optimism on Investment Decision on Individual Investor in Indonesia. *Jurnal Akuntansi*, *19*(2). https://doi.org/10.36452/akunukd.v19i2.1802

Putri, I. G. A. P. T., Sawitri, N. P. Y. R., Wijaya, B. A., & Sudiyani, N. N. (2024). Peran Mediasi Toleransi Risiko Dalam Analisis Determinasi Keputusan Investasi Mahasiswa Kota Denpasar. *Value : Jurnal Manajemen Dan Akuntansi*, *19*(1), 154–171. https://doi.org/10.32534/jv.v19i1.5035

Rahman, M., & Gan, S. S. (2020). Generation Y investment decision: an analysis using behavioural factors. *Managerial Finance*, *46*(8), 1023–1041. https://doi.org/10.1108/MF-10-2018-0534

Ramadhan, R. M., & Sutrisno. (2022). The Influence of Corporate Culture upon Performance: A Quantitative Research. *International Journal of Economics, Business and Management Research*, *06*(06), 221–227. https://doi.org/10.51505/ijebmr.2022.6616

Rani, D. T. S., .Sushmitha, S. N. ., & Vani, D. . (2024). Investigate The Impact Of Overconfidence Bias And Anchoring Bias On Risk Tolerance, And Subsequently, How Risk Tolerance Affects Investment Decisions. *Educational Administration: Theory and Practice*, *30*(5), 13629–13636. https://doi.org/10.53555/kuey.v30i5.5915

Rasheed, M. H., Rafique, A., Zahid, T., & Akhtar, M. W. (2018). Factors influencing investor's

This is an open access article under CC-BY-SA license.

Jurnal Ekonika vol 11 (1) 2026
ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

decision making in Pakistan: Moderating the role of locus of control. *Review of Behavioral Finance*, *10*(1), 70–87. https://doi.org/10.1108/RBF-05-2016-0028

Safitri, H., Mustaruddin, M., Wendy, W., & Giriati, G. (2023). *Representativeness, Mental Accounting, Overconfidence and Loss Aversion On Investment Decision: Mediated by Risk Tolerance*. https://doi.org/10.4108/eai.2-8-2023.2341066

Salman, M., Khan, B., Khan, S. Z., & Khan, R. U. (2021). The impact of heuristic availability bias on investment decision-making: Moderated mediation model. *Business Strategy and Development*, *4*(3), 246–257. https://doi.org/10.1002/bsd2.148

Samanez-Larkin, G., Mottola, G., Heflin, D., Yu, L., & Boyle, P. (2020). FINRA Investor Education Foundation: Does Overconfidence Increase Financial Risk Taking in Older Age? *Finra Investor Education Foundation*, *SEPTEMBER*, 1–5. https://psyarxiv.com/

Santina, R. O., Hayati, F., & Oktariana, R. (2021). Analisis Peran Orangtua Dalam Mengatasi Perilaku Sibling Rivalry Anak Usia Dini. *Jurnal Ilmiah Mahasiswa*, *2*(1), 1–13. file:///Users/ajc/Downloads/319-File Utama Naskah-423-1-10-20210810.pdf

Sihombing, Y. R., & Prameswary, R. S. A. (2023). The Effect of Overconfidence Bias and Representativeness Bias on Investment Decision With Risk Tolerance as Mediating Variable. *Indikator: Jurnal Ilmiah Manajemen Dan Bisnis*, *7*(1), 1. https://doi.org/10.22441/indikator.v7i1.18396

Soraya, R., Risman, A., & Siswanti, I. (2023). The Role of Risk Tolerance in Mediating the Effect of Overconfidence Bias, Representativeness Bias and Herding on Investment Decisions. *Journal of Economics, Finance and Management Studies*, *06*(07), 3324–3335. https://doi.org/10.47191/jefms/v6-i7-36

Srivastava, H., Moid, S., & Rushdi, N. J. (2024). Exploring the Mediating Role of Financial Risk Tolerance between Heuristic Biases and Working Women Investors' Investment Decisions. *International Research Journal of Multidisciplinary Scope*, *5*(4), 1412–1422. https://doi.org/10.47857/irjms.2024.v05i04.01742

Sudirman, W. F. R., Winario, M., Priyatno, A. M., & Assyifa, Z. (2023). Risk Tolerance: Heuristic Bias Towards Investment Decision Making. *Jurnal Manajemen Teori Dan Terapan | Journal of Theory and Applied Management*, *16*(2), 266–279. https://doi.org/10.20473/jmtt.v16i2.47471

Theressa, T. D., & Armansyah, R. F. (2022). Pengaruh herding, overconfidence, dan endowment bias pada keputusan investasi investor pasar modal. *Journal of Business and*

This is an open access article under CC-BY-SA license.

ISSN (*Online*) 2581-2157
ISSN (*Print*) 2502-9304

Banking, *12*(1), 35. https://doi.org/10.14414/jbb.v12i1.2989

Togatorop, W. R. V. B., & Susan, M. (2022). Keputusan investasi, kebijakan utang, dan kebijakan dividen pada nilai perusahaan. *Jurnal Manajemen Maranatha*, *22*(1), 109–120. https://doi.org/10.28932/jmm.v22i1.5341

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Judgment Under Uncertainty: Heuristics and Biases*, *185*(4157), 1–92. https://doi.org/10.4324/9781912282562

Wahyu, V. D., & Firmialy, S. D. (2024). Analysis of Financial Literacy and Overconfidence on Investment Decision with Risk Tolerance Mediation and Gender as Moderator (Case Study of Generation Z Investors in Bandung City). *Journal of Economics, Finance And Management Studies*, *07*(08), 5438–5452. https://doi.org/10.47191/jefms/v7-i8-63

Wardani, A. K., & Lutfi, L. (2016). Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business & Banking*, *6*(2). https://doi.org/10.14414/jbb.v6i2.996

Widiastuti, Soleha, E., Zakiatul Hidayah, Z., & Meirani, N. (2024). Analisis Risk Tolerance dan Overconfidence terhadap Keputusan Investasi di Bursa Efek Indonesia. *Jurnal Pendidikan Ekonomi Dan Kewirausahaan)*, *8*(1), 263. https://doi.org/10.29408/jpek.v8i1.25274

Yuliani, D., & Nurwulandari, A. (2023). The Influence of Financial Literacy, Investment Experience, and Overconfidence on Investment Decisions in National University Master of Management Study Program Students with Risk Tolerance as an Intervening Variable. *International Journal of Social Service and Research*, *3*(10), 2399–2411. https://doi.org/10.46799/ijssr.v3i10.548

Yulianis, N., & Sulistyowati, E. (2021). The Effect Of Financial Literacy, Overconfidence, And Risk Tolerance On Investment Decision. *Journal of Economics, Business, and Government Challenges*, *4*(01), 61–71. https://doi.org/10.33005/ebgc.v4i1.172

Yusuf, M. (2024). *Toleransi Risiko dan Kinerja Investasi : Dari Perspektif Generasi*. *15*(2).

This is an open access article under CC-BY-SA license.