TICEB 2025
The 3rd Tadulako International Conference on Economics and Business 2025
ISSN Proceeding
Website: https://ticeb.id

The Influence of Overconfidence, Anchoring, and Herding Bias Behaviour on Investment Decisions

Bertha Silvia Sutejo, Liliana Inggrit Wijaya*, Francesco Totti
University of Surabaya
* Email: liliana@staff.ac.id

ABSTRACT

The increase in investors indicates that many people are more aware of investments and their returns. This study aims to examine the influence of behavioral biases such as overconfidence, disposition effect, and herding on investment decisions across all generations in Indonesia. The study used probability sampling techniques to determine the sample and distributed questionnaires to 223 respondents. The analysis technique used structural equations with Smart PLS. The results showed that behavioral biases such as overconfidence had a significant positive effect on investment decisions. Meanwhile, behavioral biases such as disposition effect had a significant negative effect on investment decisions. Meanwhile, behavioral biases such as herding did not affect investment decisions.

Keywords: Behavioral bias, overconfidence, disposition effect, herding, investment decisions.

1. INTRODUCTION

The remarkable increase in investors in Indonesia demonstrates that the public is becoming more aware of investment. According to the OJK 2025 Press Release, Indonesia's financial literacy index is 66.46%, while financial inclusion is 80.51%. (OJK, 2025) This gap indicates a decline in financial literacy, leading to a lack of investment knowledge. Investment is a form of sacrificing current wealth for future gains, subject to a certain level of risk (Ningsih & Sari, 2018).

Investors often lose money due to a lack of investment knowledge and poor decision-making. When making decisions about where to invest their money, an investor must make informed investment decisions. To determine the right decisions, we must understand the factors that contribute to these mistakes. One factor that can influence investment decisions is behavioral bias (Beatrice et al., 2021; Puspawati & Yohanda, 2022).

Puspawati & Yohanda (2022), Afriani & Halmawati (2019), Sudirman & Pratiwi (2022), and Siraji et al. (2021) found that behavioral biases such as the disposition effect, overconfidence, and herding influence investment decision-making. Behavioral biases influence investment decisions among shareholders, especially among novice investors. Decision-making becomes irrational due to limited information or facts, making it prone to bias.

Research results continue to show inconsistencies in the relationship between behavioral bias and investment decisions. Afriani & Halmawati (2019); Siraji et al. (2021) demonstrated an insignificant effect of overconfidence bias on investment decisions. Investors who were more daring in stock transactions showed no difference in decision-making. This contrasts with Puspawati & Yohanda (2022), who stated that overconfidence bias influences investment decisions. Investors can make erroneous decisions due to overconfidence in expertise, which can complement facts and other understanding in ensuring investment decisions.

Puspawati & Yohanda (2022) found that the disposition effect has an insignificant influence on investment decisions. Investors tend not to sell profitable investments too quickly and hold on to losing investments for too long. Meanwhile, Siraji et al. (2021) showed that the disposition effect has a significant positive influence on investment decisions. Herding bias behavior also shows inconsistencies, as Puspawati & Yohanda (2022) and Siraji et al. (2021) found a negative influence on investment decisions, while Afriani & Halmawati (2019) found

a positive influence. Herding bias indicates biased investor behavior, which tends to follow the decisions of other investors rather than making decisions independently.

Researchers were then motivated to conduct further research related to the research gap regarding bias behavior, especially overconfidence, disposition, and herding on investment decisions. This research proposes the following problem formulations: (1) Does overconfidence bias have a positive effect on investment decisions? (2) Does the disposition effect have a negative effect on investment decisions? (3) Does herding bias have a negative effect on investment decisions?

2. LITERATURE REVIEW

Prospect theory is a theory related to economic behavior that explains how humans make choices between alternatives involving the probability of a risk faced and the likelihood of that risk (Ammann et al., 2014). This theory explains that a person makes decisions based on the value of potential losses and gains compared to the final outcome and makes an evaluation of these losses and the usefulness of using certain heuristics.

Behavioral finance is a theory that has attracted considerable attention from researchers since the 1980s. Natapura (2009) explains that investors are susceptible to behavioral bias, which can hinder returns. Behavioral bias is divided into four types: overconfidence, disposition effect, herding, and mental accounting (Pattillo & Bredenkamp, 2010).

An investment decision is an individual's policy of investing capital in one or more assets to gain future profits (Wulandari & Iramani, 2014). Investors are influenced by various biases in making investment decisions, which impact their thinking and decision-making processes, some of which have positive and others negative impacts (Baker et al., 2019; Shah et al., 2018).

Overconfidence bias is a condition where a shareholder tends to be overly confident in their skills and knowledge when making decisions (Afriani & Halmawati, 2019). Investors with this bias believe they possess special knowledge or information that others do not, thus feeling more capable of evaluating a situation or investment. Overconfidence can result in people overestimating their knowledge, ignoring risks, and overestimating their ability to control their experiences (Afriani & Halmawati, 2019). High investor confidence will increase trading volume in the capital market and directly impact the market (Barber & Odean, 2001).

The disposition effect is a behavioral bias where investors tend to sell their investments when their performance is good and are unable to tolerate potential declines (Shefrin &

Statman, 1985). Investors experiencing the disposition effect want to immediately realize profits from high-performing assets and are unwilling to acknowledge losses from underperforming assets. This often occurs among novice investors, who are quickly satisfied with their immediate profits and then sell without further analysis. This does not prevent the cumulative return from continuing to reach its highest floating profit point, which can be defined as profit-taking by investors. This tends to minimize risk.

Herding is defined as the investors' tendency to imitate others when making decisions, whether individuals, groups of investors, institutions, or the market as a whole. Herding is also susceptible to influencing the value of a brokerage. All investors, when buying and selling their investments, are based on collective information, which can influence the value of a security, resulting in sudden appreciation or depreciation (Solakoglu & Demir, 2014).

Overconfidence leads to individuals overestimating their knowledge, underestimating risks, and overestimating their ability to control events. These studies have yielded conflicting results regarding overconfidence in stock market investment decisions (Afriani & Halmawati, 2019). Mittal (2022) also investigated the influence of overconfidence bias and loss aversion on investor decision-making in Islamabad and Lahore. The results showed that overconfidence bias and loss aversion significantly impacted investment decision-making. In finance and investment, overconfidence bias can lead to several negative impacts, such as excessive trading, a lack of diversification, and excessive risk-taking.

H1: It is suspected that overconfidence bias has a negative effect on investment decisions.

The disposition effect is a behavioral bias where investors tend to hold back to minimize realized risk in the hope of realized gains. The disposition effect is estimated as the difference between the fraction of realized gains and the fraction of realized losses (Madaan & Singh, 2019). Research by Baker et al. (2019) found that individuals expressed regret for holding losing stocks too long and selling winning stocks too soon. The disposition effect can be identified by trading volume. When value declines, trading volume should also decrease. However, due to the disposition effect, the opposite occurs; when value declines, trading volume remains the same or increases. The disposition effect was first proposed by Shefrin & Statman (1985) through the development of Kahneman & Tversky's prospect theory in 1979. Therefore, the disposition effect can negatively impact investment decisions because it can interfere with the rational and objective judgment necessary for effective portfolio management.

H2: It is suspected that the Disposition effect has a negative influence on Investment Decisions.

Herding behavior is a behavioral bias that follows the judgments/arguments of other investors when making investment decisions. Investors who initially behaved rationally begin to act irrationally (Tao et al., 2021). Herding behavior is influenced by a lack of confidence in their personal abilities and experience, sometimes causing investors to react quickly to the assessments of other investors' investment decisions. Subash (2012) also explained the significant influence of herding behavior on investment decisions. Puspawati & Yohanda (2022) also concluded that herding bias has a significant negative effect on investment decisions. Investors experiencing herding bias tend to react quickly to any changes in investment decisions made by other investors. This can lead to high and unstable price fluctuations, which can be detrimental to investors who are unprepared for these changes.

H3: It is suspected that Herding Bias has a negative effect on Investment Decisions.

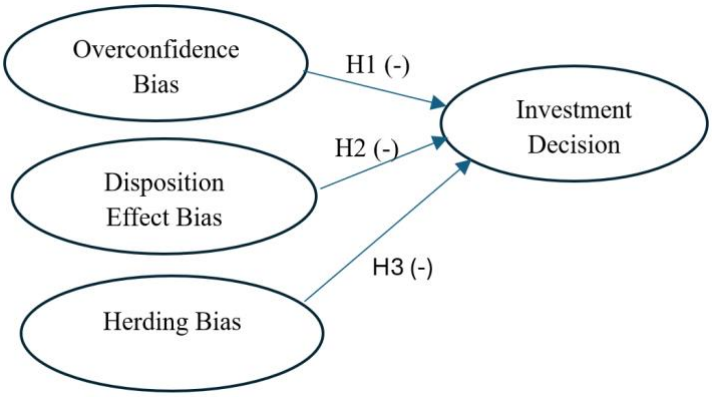

Figure 1. Research model.

3. RESEARCH METHOD

This research is a basic research of a causal quantitative research type. The research data uses primary data in the form of a questionnaire with a 5-point Likert scale. The questionnaire was compiled adopting the research of Khan et al. (2017) and Baker et al. (2019). The dependent variable, namely investment decisions, adopted 7 question items from the research of Khan et al. (2017). Meanwhile, the independent variables, namely overconfidence bias (6 question items), disposition effect variables (3 question items), and herding variables (5 question items) adopted the research of Baker et al. (2019).

The target population of this study is individual investors in the Indonesian Capital Market. The number of samples was determined based on Puspawati & Yohanda (2022), who

showed that if the number of construct variables ≤ 5, a minimum of 100 respondents is required. The sampling technique used was purposive sampling. The following are the respondent criteria in the study: (1) Investors are Indonesian citizens; (2) Minimum age 17 years; and (3) Active in transactions on the IDX in the last 1 year. The data processing method uses the SEM (Structural Equation Modeling) model through Smart PLS software. Validity testing is carried out in 2 ways, namely the discriminant validity test and the Average Variance Extracted (AVE) test, while the reliability test uses a Cronbach's alpha value > 0.6. The hypothesis test looks at the T-statistics value and the P-value <0.05. The Multigroup Analysis (MGA) test is added to see whether the data groups have significant demographic differences, namely gender.

4. RESULTS AND DISCUSSION

Respondent data was collected by distributing questionnaires through various social media platforms, such as Line and WhatsApp, to investor members. A total of 233 respondents were obtained from this questionnaire distribution. Table 1 shows the respondent profile based on gender, investment experience, education, age, and income level.

Table 1. Validity test results.

Information	Percent (%)
Gender:	
Man	49.7
Woman	50.3
Age:	
17 - < 23 Years	71.3
24 - < 31 Years	20.6
32 - < 39 Years	5.8
40 < Years	2.2
Education:	
High School/Equivalent	30
D3/S1	67.7
S2	2.6
Income:	
< Rp. 1,000,000.00	23.3
Rp 1,000,000.00 – Rp 2,000,000.00	21
Rp 2,100,000.00 – Rp 3,000,000.00	19.7
Rp 3,100,000.00 – Rp 4,000,000.00	8
Rp 4,100,000.00 – Rp 5,000,000.00	14.3
> Rp 5,000,000.00	12.5

Information	Percent (%)
Investment Experience:	
< 1 year	45.7
12 years old	24.6
2.1 – 3 years	16.1
3.1 – 4 years	8.5
> 4 years	4.9

From the respondent data, female respondents (50.3%) outnumber male respondents (49.7%). Meanwhile, for age, it is shown that the most are aged 17 - < 23 years at 71.3%, while the least are aged 40 ≤ years or older at 2.2%. From Education, it appears that the most are D3/S1 at 67.7%, and the least are S2 at 2.6%. For Income, it appears that the majority have an income level of < Rp 1,000,000.00 at 23.3%, and the smallest are those with an income level of Rp 5,000,000.00 at 12.5%. In terms of investment experience, most respondents have investment experience of more than 1 - 2 years at 49.4%. While the least are those with investment experience of > 4 years at 4.9%.

Table 2. Descriptive statistics.

Item	Statement	Mean	Standard Deviation
Investment Decision Variable (ID):			
ID1	I have a view on the purpose of life	4,336	0.727
ID2	I have knowledge about managing finances	4,085	0.887
ID3	I have knowledge about stocks and investment	3,933	0.966
ID4	I have knowledge about investing large amounts of money	3,771	0.996
ID5	I have knowledge about stock price fluctuations	3,830	1,070
ID6	I have knowledge about how to invest money	4,090	0.884
ID7	I have good knowledge of money budgeting	4,067	0.898
	Average	**4,016**	**0.918**
Overconfidence Bias (OC) Variable:			
OC1	I feel that I myself am very experienced	3,664	1,100
OC2	I consider my investment performance to be better than the stock market on average.	3,570	1,102

Item	Statement	Mean	Standard Deviation
OC3	When I buy shares that have already given profit, I feel that knowledge influences the results.	3,942	1,021
OC4	I am more confident with personal analysis than financial analysis.	3,749	1,080
OC5	I believe that investments that have been profitable in the past come from investment skills.	3,924	0.946
OC6	I feel confident that my skills and knowledge of the stock market can predict market conditions.	3,834	1,026
	Average	**3,780**	**1,045**
Disposition Effect Bias (DE) Variable:			
DE1	I am slow to respond to good and bad news and tend to sell profitable stocks too early and hold on to losing one's too long.	3,399	1,163
DE2	I was not aware that there was a loss that needed to be addressed on my investment.	3,197	1,178
DE3	I sold shares when I was profitable because I was afraid of experiencing losses.	3,386	1,269
	Average	**3,327**	**1,203**
Herding Bias (HB) Variable:			
HB1	I consult with other people when buying or selling shares.	3,753	1,095
HB2	I am influenced by other investors' decisions when making share purchase and sale transactions.	3,534	1,124
HB3	I react quickly to changes in other investors' decisions and follow their reactions to the stock market.	3,529	1,023
HB4	I consult with other people before buying shares.	3,726	1,149
	Average	**3,635**	**1,097**

The score on the investment decisions variable is considered high because the average mean value is 4.016, meaning that the majority of respondents agree that investors' basic knowledge of finance and investment is good. The highest score is on statement ID1, namely "I have a view about life goals" with a score of 4.336. Meanwhile, the lowest score is on statement ID4, namely "I have knowledge about investing large amounts of money" with a

score of 3.771. The smallest standard deviation value on this variable is statement ID1 (0.727), meaning that respondents' answers are the most homogeneous compared to other statement items.

Similarly, the score for the overconfidence bias variable had an average mean value of 3.780, indicating a high degree of overconfidence bias in investor decisions regarding a stock. The highest score was for statement OC3, "When I buy stocks that have already generated profits, I feel that knowledge influences the outcome," with a score of 3.942. Meanwhile, the lowest score was for statement OC2, "I consider my investment performance to be better than the stock market on average," with a score of 3.570. The smallest standard deviation was for statement OC5, at 0.942.

The disposition effect variable has an average mean value of 3.327, which means that respondents agree that bias behavior is too rash or panic to sell shares when prices are rising and buy shares when they are falling. The highest score is for statement DE1, namely "I am late in responding to good and bad news and tend to sell profitable shares too early and hold them too long when they lose" with a score of 3.399. The lowest score is for statement DE2, namely "I do not realize that there is a loss that needs to be acted on in my investment" with a score of 3.197. The smallest standard deviation value for statement DE1 is 1.163.

Meanwhile, the herding bias variable has an average mean value of 3.635, indicating that biased behavior tends to base decisions on the decisions of other investors and does not reanalyze according to the investor's beliefs, which is quite high. The highest score is for statement HB1, namely "I consult with others before buying shares" with a score of 3.753. Meanwhile, the lowest score is for statement HB3, namely "I react quickly to changes in other investors' decisions and follow their reactions to the stock market" with a score of 3.529. The smallest standard deviation value for the HB3 indicator is 1.023.

The results of the validity test with Smart PLS are shown in Table 3 below.

Table 3. Validity test results.

Variables	Indicator	Factor Loading	Information
Investment Decisions (ID)	ID1	0.575	Invalid
	ID2	0.730	Valid
	ID3	0.819	Valid
	ID4	0.804	Valid
	ID5	0.815	Valid
	ID6	0.825	Valid
	ID7	0.782	Valid
Overconfidence Bias (OC)	OC1	0.814	Valid
	OC2	0.817	Valid
	OC3	0.739	Valid
	OC4	0.773	Valid
	OC5	0.784	Valid
	OC6	0.780	Valid
Disposition Effect Bias (DE)	DE1	0.739	Valid
	DE2	0.894	Valid
	DE3	0.801	Valid
Herding Bias (HB)	HB1	0.815	Valid
	HB2	0.807	Valid
	HB3	0.809	Valid
	HB4	0.824	Valid

Based on Table 3, it appears that one indicator, ID1, has a loading factor of less than 0.7, meaning it is invalid, as the loading factor value does not meet the criteria. Therefore, the invalid indicator was removed, resulting in a model similar to Figure 2. The results show that all indicators have loading factors above 0.7, indicating they are valid.

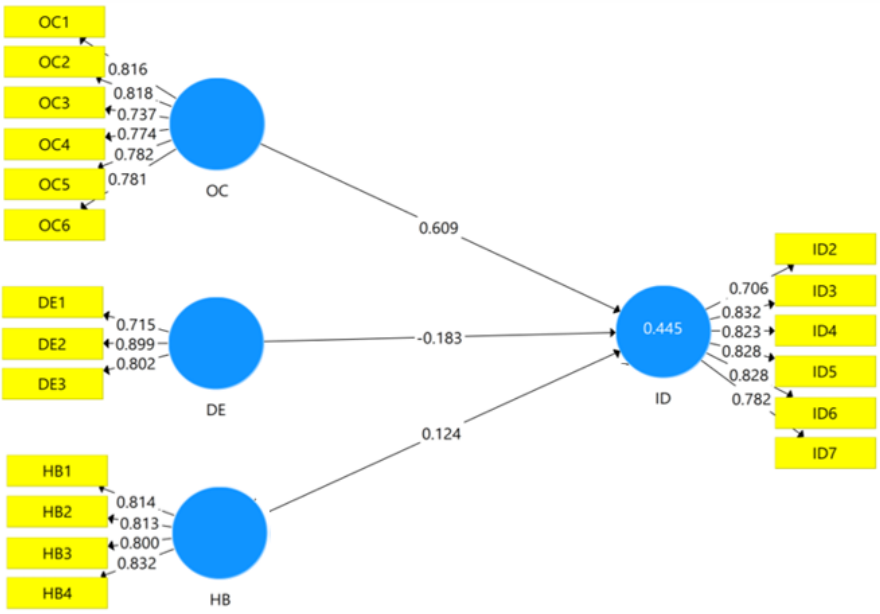

Figure 2. Loading value construct.

The results of the AVE (Average Variance Extracted) values are shown in Table 4. All AVE values are above 0.5, meaning that all ID, OC, DE, and HE constructs have good convergent validity.

Table 4. AVE test results.

Variables	AVE value	Information
Investment Decisions (ID)	0.642	Valid
Overconfidence Bias (OC)	0.617	Valid
Disposition Effect Bias (DE)	0.654	Valid
Herding Bias (HB)	0.664	Valid

Table 5. Reliability test results.

Variables	Cronbach Alpha	Composite Reliability	Information
Investment Decisions (ID)	0.888	0.915	Valid
Overconfidence Bias (OC)	0.875	0.906	Valid
Disposition Effect Bias (DE)	0.767	0.849	Valid
Herding Bias (HB)	0.835	0.888	Valid

Similar to the reliability test, the results of Cronbach's alpha and Composite Reliability (CR) in Table 5 show that all variables are greater than 0.7, which means they have good reliability. The results of R-squared and R-squared adjusted are shown in Table 6. The r square value of 0.445 means that the OC, DE, and HB variables can explain 44.5% of the variance of the ID variable. The adjusted R-squared value of 0.435 means that after being reduced by the effect of the number of independent variables, 43.5% of the variance of the ID variable can be explained by the OC, DE, and HB variables.

Table 6. R-squared results.

	R-square	R-square adjusted
ID	0.445	**0.435**

The study also conducted a descriptive MGA analysis. The results of the descriptive MGA analysis are shown in Table 7 below.

Table 7. MVG descriptive analysis results.

Hypothesis	Path Coefficient Original (Men)	Path Coefficient Original (Women)	Men's P-Values	Women's P-Values
H1: OC→ID	0.512	0.652	**0,000**	**0,000**
H2: DE→ID	-0.139	-0.165	**0.116**	**0.078**
H3: HB→ID	-0.177	0.098	**0.146**	**0.166**

The MVG results for H1 show a P-value of 0.000, meaning that both male and female genders represent overconfidence bias towards investment decisions. Meanwhile, H2 shows a P-value of 0.116 for men and 0.078 for women, meaning that both genders cannot represent the disposition effect bias towards investment decisions. In H3, the P-value for men is 0.146 and the P-value for women is 0.166, meaning that both genders also cannot represent herding bias towards investment decisions. The results of the hypothesis test are shown in Table 8. The results show that H1 and H2 are significant, while H3 is not.

Table 8. Hypothesis test results.

Hypothesis	Original Sample	T-Statistics	P-Values	Information
H1: OC→ID	0.609	8,837	**0,000**	Rejected
H2: DE→ID	-0.183	2,010	**0.022**	Accepted

Hypothesis	Original Sample	T-Statistics	P-Values	Information
H3: HB→ID	0.014	0.196	**0.422**	Rejected

Based on the hypothesis testing results in Table 8, H1 was found to be significantly positive, meaning overconfidence bias has a significant positive effect on investment decisions. H1 was rejected. The research results are consistent with Puspawati & Yohanda (2022) and Sudirman & Pratiwi (2022), who stated that the higher the level of overconfidence bias, the more confident investors will be that their investment plans will succeed because they feel able to predict and identify stocks that will be profitable in the future.

The H2 test result was significantly negative, meaning the disposition effect negatively impacts investment decisions. H2 was accepted. The research findings are consistent with those of Fadlillah (2022), Mittal (2022), Wendy (2021), and Zahera & Bansal (2019). A higher disposition effect is associated with a lower level of investment decision-making by investors. The lower disposition effect can be attributed to a more diverse investment portfolio, greater investment experience, and a higher level of investment understanding and literacy among young investors. When investors have a diverse portfolio, they monitor their investment portfolio more frequently, thus reducing the likelihood of the disposition effect. The existence of digital platforms for online investment via smartphones can help investors monitor the price movements of their investment assets at any time. The disposition effect can be minimized if investors have good financial literacy. This effect occurs because investors tend to sell winning (high-performing) stocks too quickly and hold losing (poor-performing) stocks too long, which can be detrimental to investors (Wendy, 2021). Fadlillah (2022) also emphasized that investor decision-making inevitably involves emotions. The involvement of psychological aspects in decision-making causes investors to become irrational. Irrational investors only invest based on instinct, not accustomed to analyzing the business sector situation (Natapura, 2009).

Meanwhile, the results of H3 showed no significance, meaning herding bias did not significantly influence investment decisions. H3 was rejected. These results align with Puspawati & Yohanda (2022) and Siraji et al., (2021). Mahadevi Aulia & Asandimitra (2021) showed that other factors influence the investment decision-making process besides herding behavior, such as knowledge, personal technical and fundamental analysis. Setiawan et al. (2018) also showed that investors tend to be receptive to information and conduct sound

analysis when selecting stocks. Investors who tend to be rational are not influenced by other investors and do not follow market noise.

5. CONCLUSION

The study found that overconfidence bias actually has a significant positive effect on investors, thus rejecting H1. Meanwhile, disposition effect bias has a significant negative effect, thus accepting H2. Meanwhile, herding bias is insignificant, thus rejecting H3. The theoretical implication is that the research results align with prospect theory, which states that investors with high levels of financial literacy are naturally overconfident and certain of their investment decisions, leading to high returns. Therefore, this prospect theory can influence investors to analyze the companies they buy more deeply, thus providing them with a better understanding of the companies they are purchasing and believing in their potential for growth.

The practical implication of this research is that investors do not conduct in-depth analysis of company fundamentals, suggesting that stock prices could potentially rise higher. Investors tend to sell winning (high-performing) stocks too quickly and hold onto losing (poorly performing) stocks. Herding bias can influence investment decisions by making investors tend to follow the actions of others, rather than making decisions based on their own independent analysis. Herding bias can create instability in the market. If many investors follow the same trend, this can lead to extreme price fluctuations and market volatility.

The recommendation for investors is to conduct introspection and try to identify biases that may influence their investment decisions. It's important to conduct your own research and base decisions on facts, not the opinions of others. Furthermore, increase your knowledge and understanding of investing and the financial markets. A sound financial education can help you make better decisions and avoid behavioral biases.

REFERENCES

Afriani, D., & Halmawati, H. (2019). The Influence of Cognitive Dissonance Bias, Overconfidence Bias, and Herding Bias on Investment Decision Making. Journal of Accounting Exploration, 1(4), 1650–1665.https://doi.org/10.24036/jea.v1i4.168

Ammann, M., Frey, R., & Verhofen, M. (2014). Do Newspaper Articles Predict Aggregate Stock Returns? Journal of Behavioral Finance, 15(3), 195–213.https://doi.org/10.1080/15427560.2014.941061

Baker, H.K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. Managerial Finance, 45(1), 124–146.https://doi.org/10.1108/MF-01-2018-0003

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. Quarterly Journal of Economics, 116(1), 261–292. https://doi.org/10.1162/003355301556400

Beatrice, V., Murhadi, WR, & Herlambang, A. (2021). The effect of demographic factors on behavioral biases. Jurnal Siasat Bisnis, 25(1), 17–29.

Fadlillah, NO 42(September), 101880. (2022). Disposition Effect on Decision Making.

Khan, A.R., Azeem, M., & Sarwar, S. (2017). Impact of Overconfidence and Loss Aversion Biases on Investment Decisions: Moderating Role of Risk Perception. International Journal of Transformation in Accounting, Auditing & Taxation, 1(1), 23–35. http://management.eurekajournals.com/index.php/IJTAAT/article/view/93/2 25

Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. International Journal of Financial Research, 10(4), 55–67. https://doi.org/10.5430/ijfr.v10n4p55

Mahadevi Aulia, S., & Asandimitra, N. (2021). The Influence of Status Quo, Herding Behavior, Representativeness Bias, Mental Accounting, and Regret Aversion Bias on Investment Decisions of Millennial Investors in Surabaya City. Journal of Management Science, 9(2), 1–15.

Mittal, S. K. (2022). Behavior biases and investment decisions: theoretical and research framework. Qualitative Research in Financial Markets, 14(2), 213 228.https://doi.org/10.1108/QRFM-09-2017-0085

Natapura, C. (2009). Analysis of Institutional Investor Behavior Using the Analytical Hierarchy Process (AHP) Approach. Business & Bureaucracy, Journal of Administrative and Organizational Sciences, 16(3), 7. https://doi.org/10.20476/jbb.v16i3.620

Ningsih, D., & Sari, SI (2018). The Influence of Investment and Labor on Economic Growth in Batam City. Barelang Accounting Journal, 3(1), 21-31.

FSA. (2025, May 2). ojk.go.id. Retrieved from ojk.go.id:https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/OJK-dan-BPS-Announce-Hasil-Survei-Nasional-Literasi-Dan-Inklusi-Keuangan-SNLIK-Tahun-2025.aspx

Pattillo, C., & Bredenkamp, H. (2010). Financing the Response to Climate Change. IMF Staff Position Notes, 2010(06), 1. https://doi.org/10.5089/9781462386864.004

Puspawati, D., & Yohanda, AR (2022). Behavioral Bias in Young Generation Investment Decisions. Accountability, 16(1), 41–60.https://doi.org/10.29259/ja.v16i1.15724

Shah, SZA, Ahmad, M., & Mahmood, F. (2018). Heuristic biases in investment decision-making and perceived market efficiency: A survey at the Pakistan stock exchange. Qualitative Research in Financial Markets, 10(1), 85–110.https://doi.org/10.1108/QRFM-04-2017-0033

Shefrin, H., & Statman, M. (1985). The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence. The Journal of Finance, 40(3), 777–790.https://doi.org/10.1111/j.1540 6261.1985.tb05002.x

Siraji, M., Nazar, MCA, & Ali, MSI (2021). Irrational Behavior and Stock Investment Decisions. Does Gender Matter? Evidence from Sri Lanka. Journal of Management, Innovation and Technologies, 11(2), 2185–2204.

Solakoglu, M. N., & Demir, N. (2014). Sentimental herding in Borsa Istanbul: informed versus uninformed. Applied Economics Letters, 21(14), 965–968.https://doi.org/10.1080/13504851.2014.902015

Subash, R. (2012). Role of Behavioral Finance in Portfolio Investment Decisions: Evidence from India. Faculty of Social Science Institute of Economic Studies, 8-9 Dash, MK (2010). Factors Influencing Investment. http://ies.fsv.cuni.cz/default/file/download/id/20803

Sudirman, WFR, & Pratiwi, A. (2022). Overconfidence Bias in Investment Decision Making: The Role of Gender Differences. Muhammadiyah Riau Accounting and Business Journal, 3(2), 081–092.https://doi.org/10.37859/mrabj.v3i2.3493

Tao, R., Su, C.W., Xiao, Y., Dai, K., & Khalid, F. (2021). Robo advisors, algorithmic trading and investment management: Wonders of the fourth industrial revolution in financial markets. Technological Forecasting and Social Change, 163(May), 120421.https://doi.org/10.1016/j.techfore.2020.120421

Wendy, W. (2021). The Interaction Effect of Financial Literacy on Investment Decisions: Testing Psychological Biases. Journal of Business Economics and Entrepreneurship, 10(1), 36. https://doi.org/10.26418/jebik.v10i1.43403

Wulandari, & Iramani. (2014). The Influence of Bias on Stock Investment Decisions of Young Investors in Surabaya.

Zahera, S.A., & Bansal, R. (2019). A study of prominence for disposition effects: a systematic review. Qualitative Research in Financial Markets, 11(1), 2–21. https://doi.org/10.1108/QRFM-07-2018-0081