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Multigroup Analysis: Stock Investment Decisions in Indonesia

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Abstract:

This study aims to analyze the effect of financial literacy, financial inclusion, and herding behavior on investment decisions, as well as the mediating role of financial inclusion and herding behavior on the effect of financial literacy on investment decisions. The research method used is a quantitative approach using a sample of 300 investors who were selected through non-probability sampling techniques. Data were analyzed using descriptive and inferential statistics, with Structural Equation Modeling (SEM) techniques using Partial Least Square (SEM-PLS) through the Smart PLS 3.0 program. The test results show that financial literacy has a positive and significant effect on financial inclusion, financial literacy has a positive and significant effect on Herding behavior, financial literacy has a positive and significant effect on Generation X and Z investment decisions, financial inclusion has a positive and significant effect on investment decisions, Herding behavior has a positive and significant effect on Generation Y and Generation Z investment decisions, Financial inclusion is able to mediate the effect of financial literacy on investment decisions in a complementary manner in generations X and Z and full mediation in Generation Y, Herding behavior is able to mediate the effect of financial literacy on Generation Y investment decisions in full mediation, but in Generations X and Z Herding behavior does not mediate the effect of financial literacy on investment decisions. The findings of this study are useful for the development of behavioral finance theory, organism response stimulus theory, and prospect theory and are useful for stock investors in Generations X, Y, and Z, securities companies, and the Indonesia Stock Exchange in an effort to improve investment decisions.

Keywords: *Financial Literacy, Financial Inclusion, Herding Behavior, Investment Decisions.*

INTRODUCTION

Investment decision making is a crucial process for every investor, which is influenced by a number of varying factors. Decision making in Behavioral Finance Theory emphasizes on investing in uncertain and risky situations, as well as underlying assumptions on observed financial behavior (Kang *et al.*, 2022). Investors face a variety of factors that influence investment decision making, and this is a crucial process in their financial

planning. Some investors tend to make a comprehensive assessment and consider various factors before making the right decision (Singh and Narta, 2020), this makes the decision-making process easier, because investors can identify all possible outcomes and plan their steps better.

Complex factors such as over-opinion, ambiguity, perception, and risk, investment decision making is often a complex challenge (Singh and Narta, 2020). Risk is also an important element that must be considered in every financial decision. Sometimes, investment decisions can be based on inaccurate, under-analyzed, or imperfect information, which can potentially lead to less than satisfactory or even detrimental results in the future (Mihalache and Bodislav, 2019), therefore it is important for investors to conduct careful analysis and calculate risks well before making significant investment decisions (Waheed *et al.*, 2020).

Investment is an attractive option today, especially with the ongoing economic paradigm shift. According to Baihaqqy et al. (2020) and Desky and Mubarrak (2022), this phenomenon is known as investment. Although investment provides great benefits to investors, there is an increasing global interest in riskier assets, such as stocks and government bonds in developing countries. The interest in riskier assets reflects the desire to achieve higher returns. However, it is important to note that investment development must be accompanied by a deep understanding of the risks involved such as economic uncertainty, market fluctuations, and various business and financial risks (Zupok, 2022).

Behavioral finance presents an alternative perspective that rejects the assumption of rationality of market participants, emphasizing the role of psychology in the often-irrational behavior of investors. In this paradigm, investors are affected by cognitive and emotional biases that lead to irrational valuations. According to Riaz et al. (2020) *behavioral finance* is a theory that arises from the psychological side of an investor, which in this theory explains that emotional and psychological conditions can affect the behavior of investors. The use of the *behavioral finance* perspective in this study aims to reveal the effect of financial literacy on investor behavior in making investment decisions, focusing on aspects of financial attitudes, knowledge, and behavior. Prospect theory is the basis for understanding this phenomenon, with *herding behavior* being one of the main threats in the capital market because it can cause volatility and irrational behavior (Liu *et al.*, 2021). Understanding investor behavior is an important step towards developing wiser investment strategies and controlling biased factors that influence individual investment decision-making (Carpentier and Suret, 2021).

Financial inclusion as a stimulus, individuals process this information based on their financial literacy and investor *herding* behavior, which is then reflected in the investment decisions taken (Islam and Rahman, 2017; Jiang et al., 2010; Roschk et al., 2017). This research is a development of a research model previously conducted by Sabir et al. (2019), Listiyani et al. (2021), Pramedi and Haryono (2021), Asandimitra and Ulumudiniati (2022), and

Amalia and Asandimitra (2022), Sutejo (2021), Nugraha et al. (2021), Qasim et al. (2019), Javed et al. (2017), Kanwal et al. (2019), Fatima and Sharma (2021), Karmacharya et al. (2022) and Adiputra et al. (2021) regarding investment decisions that are influenced by financial literacy, financial inclusion, and *herding* behavior. So that this study will examine how financial literacy can influence investment decisions through financial inclusion and *Herding* behavior of investors and see stock investment decisions in Generations X, Y and Z with financial literacy, financial inclusion and *Herding* behavior using *Multi Group Analysis and* the implementation of the *Stimulus Organism Response* (SOR) theory.

Referring to previous research, the theoretical basis and research objectives, the research conceptual framework entitled can be seen in the following figure.

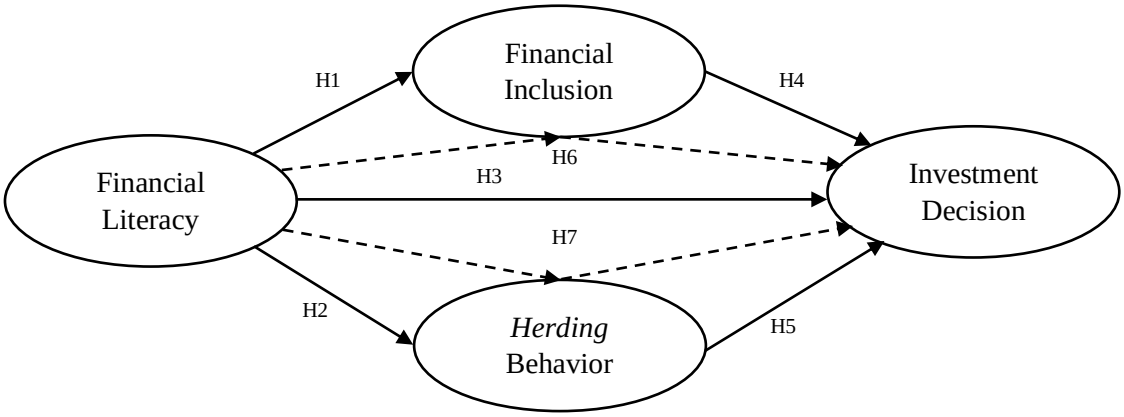

Figure 1. Theoretical Framework

Investment Decisions. Investment decisions are an important process that reflects how an organization or individual allocates its financial resources to achieve long-term goals. According to Brigham and Houston (2021), investment decisions are decisions related to capital expenditures that generate long-term profits. This process involves identifying investment opportunities, analyzing risks, and making decisions based on expected returns. Investment decisions are an important aspect of financial management, both at the individual and organizational levels. According to Wang and Nuangjamnong (2022), investment decisions involve evaluating opportunities based on risk analysis, potential returns, and financial goals.

Financial Literacy. Financial literacy is one of the government's focuses in creating prosperity for the community. The government hopes that through financial literacy, it can help stabilize the financial system, community welfare, and inclusive development can be achieved more easily. The Indonesian government has been encouraged to form the Indonesian National Financial Literacy Strategy (SNLKI) since 2013 (Brillianti and Kautsar, 2020). The results of the National Financial Literacy and Inclusion Survey (SNLIK) conducted by the Financial Services Authority in 2022 indicate that the capital market financial literacy index only reached 4.11

percent compared to the overall financial literacy index reaching 49.68 percent 8 indicating that the level of financial literacy in the capital market sector is still low. According to OJK (2022), financial literacy is not only related to the knowledge, ability, and trust of the community in financial institutions, but also related to the habits of the community in using and managing their finances. The level of financial literacy possessed by the community is also able to strengthen the economic growth of a country (Brillianti and Kautsar, 2020). Financial literacy has an influence on investment decisions, by having a good level of literacy, the behavior or investment decisions of finances will also be better, this is in line with the research results of Jennifer and Widoatmodjo (2023) who found that financial literacy has an influence on financial management in determining investment choices.

Financial Inclusion. Financial inclusion provides individuals with access to financial products and services that are affordable, meet their needs, and are provided responsibly and sustainably (Senyo *et al.*, 2022). According to the definition by Huang et al. (2021) and Vo et al. (2021), financial inclusion refers to a situation where individuals can access and utilize financial services, which are also seen as important predictors of economic development (Ashraf, 2022). Financial inclusion plays a role in ensuring that there are strong financial markets, so that financial services become more accessible to everyone (Ofori-Abebrese *et al.*, 2020).

Herding Behavior. Herding behavior is a group behavior phenomenon that is widely studied in financial markets, especially in the stock market where this behavior is carried out by a group of investors who are followed by other investors and follow each other, in other words, herding is often observed when people follow the same choices, and most do this to imitate the actions of others (Liu *et al.*, 2021). Herding behavior is caused by a factor of lack of confidence in the abilities and personal experiences of investors who usually react quickly to the assessment of other investors' investment decisions (Ramdani, 2018). This is supported by Akinkoye and Bankole (2020), Madaan and Singh (2019), Mutawally et al. (2021) and Mahmood et al. (2020), herding has a significant effect on investment decisions.

METHODS

This research is classified as associative research (relationship), which is research that aims to determine the relationship between two or more variables (Sugiyono, 2015). The quantitative approach used in this study is to examine statistical data and test a hypothesis. The questionnaire was used as the main instrument of this research. Respondents can choose between 10 types of answer choices starting from choice 1 (indicating a very low perception) which is the minimum value to choice 10 (indicating a very high perception) which is the maximum value. This research was conducted on stock investors throughout Indonesia for the reason that there is a

phenomenon of the low number of investors in Indonesia in the capital market with a low level of capital market financial literacy compared to the average level of financial literacy in general according to the results of the National Survey of Financial Inclusion Literacy in 2022. The population in this study were all stock investors in Indonesia, totaling 5,255,571 people (Source: Indonesian Central Securities Depository, 2023), with a sample of 300 investors from Generations X, Y, and Z, selected through non-probability sampling techniques. The data analysis technique uses a Structural Equation Modeling (SEM) approach with the help of SmartPLS 3 software.

RESULTS AND DISCUSSION

Outer Model Testing. *Convergent Validity* of the measurement model with reflexive indicators is assessed based on the correlation between *item scores* or *component scores* estimated with PLS Software. An individual reflexive measure is said to be high if it correlates more than 0.70 with the variable being measured. Research in the early stages of the measurement scale loading value of 0.5 to 0.6 is considered sufficient (Wiyono, 2011: 403). This study will use a *loading factor* limit of 0.60. The *outer model* value or the correlation between variables and variables all meet *convergent validity* with a *loading factor* value above 0.60.

The investment decision variable shows that all indicators have an outer loading of more than 0.60, with the indicator "Y2.3 Managing personal funds to invest" as the strongest measure (0.985). The financial inclusion variable shows that all statements have an outer loading value above 0.60, with the statements "M1.1.1 Feeling the ease of access to the capital market," "M1.1.2 Feeling the benefits of the investment made," "M1.3.1 Capital market investment products according to needs," and "M1.3.2 Feeling the results of the investment" having the largest outer loading (0.991).

The Herding behavior variable shows that all statements have an outer loading value above 0.60, with the statements "M2.3.1 Quickly respond to other investors' references," and "M2.3.2 Easily make transactions based on issuer news" as the strongest measures (0.990). The financial literacy variable shows that all statements have an outer loading value above 0.60, with the statements "X1.3 Actively improve financial management knowledge," "X3.1 Routinely set aside as income for investment," and "X3.2 Make long-term investment plans to achieve goals" having the largest outer loading (0.989). The results of the *second order* convergent validity test on investment decisions, financial inclusion, *herding* behavior, and financial literacy with a reflective measurement model obtained a loading factor value of more than 0.60 so that the indicators of the variables have met convergent validity.

Discriminant Validity is carried out to ensure that each concept of each latent variable is different from other variables. The model is said to have good *Discriminant Validity* if each indicator *loading* value of a latent variable

has a *loading* value that is greater than the *loading value* when correlated with other latent variables

Table 1. Discriminant Validity of Research Variables Using Fornell-Larcker Criterion

No	Variables	X	M1	M2	Y
1	Financial Literacy	**0,976**	0,958	0,819	0,874
2	Financial Inclusion	0,958	**0,975**	0,831	0,880
3	*Herding* Behavior	0,900	0,831	**0,971**	0,916
4	Investment Decision	0,874	0,880	0,916	**0,965**

Source: Data Analysis of Smart PLS

Table 1 shows that the entire root of the AVE (Fornell-Larcker Criterion) of each construct is greater than its correlation with other variables. All latent variables AVE Root value > Correlation between other constructs, so the discriminant validity requirements in this model have been met. Reliability is a tool for measuring a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if a person's answer to a statement is consistent or stable over time. Respondents' answers to these questions are said to be reliable if each question is answered consistently or the answers should not be random because each question wants to measure the same thing. Reliability measurement can be done with One Shot or one-time measurement. Measurement is done only once and then the results are compared with other questions or measure the correlation between question answers. The tool for measuring reliability is Cronbach's Alpha. A variable is said to be reliable, if the result $\alpha > 0.70$ = reliable and the result $\alpha < 0.70$ = not reliable.

Table 2. Internal Consistency Reliability

No.	Variables	*Cronbach's Alpha*	*Composite Reliability*	*Average Variance Extracted (AVE)*
	Investment Decision	**0,991**	**0,992**	**0,931**
1	Investment Choice (Y1)	0,973	0,982	0,949
2	Fund Management (Y2)	0,978	0,986	0,958
3	Future Investment Expectations (Y3)	0,980	0,987	0,962
	Financial Literacy	**0,994**	**0,995**	**0,953**
1	*Basic Personal Finance* (X1.1)	0,984	0,989	0,969
2	*Financial Management* (X1.2)	0,974	0,987	0,974
3	*Saving and Investment* (X1.3)	0,977	0,989	0,978
4	*Risk Management* (X1.4)	0,973	0,987	0,974
	Financial Inclusion	**0,993**	**0,994**	**0,951**
1	*Welfare* (M11)	0,982	0,991	0,982
2	*Quality* (M12)	0,980	0,990	0,981
3	*Usage* (M13)	0,982	0,991	0,982
4	*Access* (M14)	0,985	0,990	0,971

	***Herding* Behavior**	**0,991**	**0,993**	**0,943**
1	Following Other Investors Decision Choices (M21)	0,979	0,986	0,960
2	Follow Selling/Buying Other Investors' Instruments (M22)	0,983	0,989	0,968
3	Quick Reaction to Market Changes (M23)	0,979	0,990	0,980

Source: Data Analysis of Smart PLS

The overall evaluation results, both convergent. Discriminant Validity, composite reliability, which have been described above, it can be concluded that all indicators as latent variable measures are all valid and reliable, so that further testing can be carried out. In addition, all Average Variance Extracted (AVE) values> 0.50 and all Cronbach's Alpha (α) values > 0.70 so that all variables are said to be reliable.

Model Fit. Evaluation of the research model is carried out in two ways, first seen from the results of the model feasibility test analysis through *R-square* (R2). Second, it will be seen thoroughly using the structural model evaluation method through *Goodness of Fit*. In table 3, it can be seen that the *R-square* value of the investment decision variable is 0.888. It can be interpreted that 88.8 percent of the decision construct variability is explained by financial literacy, financial inclusion, and hedging behavior variables, while 11.2 percent of investment decision variables are explained by variables outside the model. The financial inclusion variable has 91.8 percent of its variability explained by financial literacy, while 8.2 percent of the financial inclusion variable is explained by variables outside the model. *Herding* behavior variable has 67 percent of its variability explained by financial literacy variables, while 33 percent is explained by variables outside the model.

Table 3. R Square

No	Variable	R Square	R Square Adjusted
1	Investment Decision	0,888	0,887
2	Financial Inclusion	0,918	0,918
3	Herding Behavior	0,670	0,669

Source: Data Analysis of Smart PLS

Goodness of fit (GoF) is a test of the feasibility of a research model to determine the accuracy of the sample regression function in estimating the actual value *(Ghozali and Latan, 2015)*. The GoF value is in the range of values between 0 and 1(Akter et al., 2011;Hair et al., 2017). A GoF value that is closer to one means that the model is getting better, and vice versa, the closer to zero the model is said to be getting worse. The GoF calculation formulation is the square root of the average communality or Avarage Variance Extracted (AVE) value multiplied by the average R-Square. The GoF calculation is as follows (Akter *et al.*, 2011):

$$GoF = \sqrt{(\text{average AVE x average } R^2)} \quad \text{.....(1)}$$

= √((0,931+0,949+0,958+0,962+0,951+0,982+0,981+0,982+0,971+ 0,943+0,960+0,968+0,980+0,953+0,969+0,974+0,978+0,974)/18)x((0,888+0,918+0,670)/3)
= √(0,965 x 0,825)
= √0,796
= 0,892

The GoF calculation results show a value of 0.892 which is close to 1 (one), which means that it includes a very fit predictive model, this indicates that the overall accuracy of the model measurement is very good. Evaluation of the structural model as measured by *Q Square Predictive Relevance* (Q^2) and *Goodness of Fit* (GoF) shows that the model formed by the constructs in this study has a very good model category.

Direct Effects. In testing the causal relationship, the original sample value indicates the direction and magnitude of the effect of exogenous variables on endogenous variables, while the p-value indicates the level of significance in hypothesis testing. The results of hypothesis testing are presented in Figure 2.

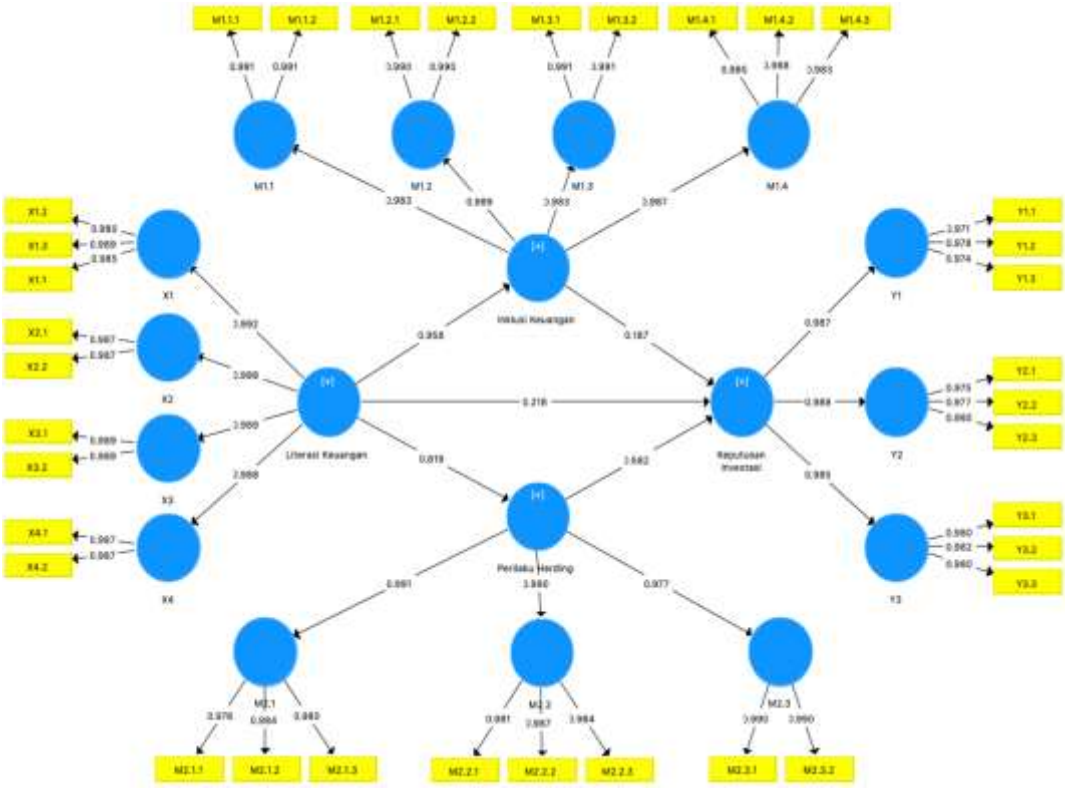

Figure 2. Test Results of Outer Model
Source: Data Analysis of Smart PLS

The results of data analysis show that financial literacy has a positive and significant influence on financial inclusion in the Indonesian capital market (t = 141.883, p < 0.001), which is supported by statistical test results showing that hypothesis 1 is accepted. The study also found that financial literacy has a positive and significant effect on herding behavior (t = 36.062, p < 0.001), but the statistical test results reject hypothesis 2 which states a negative effect. Furthermore, financial literacy also has a positive and significant effect on investment decisions (t = 2.447, p = 0.014), with acceptance of hypothesis 3. In terms of generation, financial literacy has a positive and significant effect on financial inclusion and herding behavior in Generation X (t = 14.707, p < 0.001; t = 12.767, p < 0.001), Generation Y (t = 101.608, p < 0.001; t = 29.792, p < 0.001), and Generation Z (t = 148.591, p < 0.001; t = 44.553, p < 0.001).

While on investment decision, financial literacy has a significant influence on Generation X (t = 2.627, p = 0.009) and Z (t = 2.634, p = 0.009), but not significant on Generation Y (t = 1.626, p = 0.105). In addition, financial inclusion also has a positive and significant effect on investment decisions (t = 2.012, p = 0.045), with the statistical test results supporting the acceptance of hypothesis 4. The analysis also shows that Herding behavior

has a positive and significant effect on investment decisions (t = 10.175, p < 0.001), and the statistical test results support the acceptance of hypothesis 5. However, Herding behavior has no significant influence on investment decisions in Generation X (t = 0.045, p = 0.964) and Z (t = 0.278, p = 0.781), while it is significant in Generation Y (t = 10.852, p < 0.001).

Indirect Effects (Mediation). The indirect effect is measured using the mediator analysis procedure according to (Hair Jr. et al., 2021). The results of the indirect effect hypothesis test are presented in the following table:

Table 4. Hypothesis Testing of the Effect of Financial Literacy Through Financial Inclusion on Investment Decisions

Generation	*Original Sample* (O)	T *Statistics* (|O/STDEV|)	*P-Value*	Ket.
Combined (X, Y, and Z)	0,179	2,016	0,044	*Complementary (Partial Mediation)*
Gen X	0,496	2,349	0,019	*Complementary (Partial Mediation)*
Gen Y	0,216	1,953	0,051	*Indirect Only (Full Mediation)*
Gen Z	0,496	3,037	0,003	*Complementary (Partial Mediation)*

Source: Data Analysis of Smart PLS

Hypothesis 6 states that financial inclusion has a complementary partial mediating role on the effect of financial literacy on investment decisions. The direct effect of financial literacy on financial inclusion is significant with a probability value of 0.000 (smaller than 0.05) and a positive original sample estimate of 0.958. The direct effect of financial inclusion on investment decisions is also significant with a probability value of 0.045 and a positive original sample estimate of 0.187. In addition, the direct effect of financial literacy on investment decisions is significant with a probability value of 0.014 and a positive original sample estimate of 0.218, all of which indicate the mediating role of financial inclusion in accordance with the mediator analysis procedure Hair Jr. et al. (2021). In Generation X, financial literacy has a significant effect on financial inclusion and investment decisions with an original sample estimate of 0.830 and 0.296, respectively. Financial inclusion also has a significant effect on investment decisions with a value of 0.598, indicating complementary mediation. In Generation Y, financial literacy has a significant effect on financial inclusion with an original sample estimate of 0.959, and financial inclusion has a significant effect on investment decisions with a value of 0.225. However, financial literacy does not have a significant direct effect on investment decisions, indicating full mediation. In Generation Z, financial literacy has a significant effect on financial inclusion and investment decisions with an original sample estimate of 0.973 and 0.398, respectively. Financial inclusion also has a significant effect on investment decisions with a value of 0.509, indicating complementary mediation.

Table 5. Hypothesis Testing of the Effect of Financial Literacy Through Herding Behavior on Investment Decisions

Generation	*Original Sample* (O)	T *Statistics* (|O/STDEV|)	*P-Value*	Ket.
Combined (X, Y, and Z)	0,477	8,872	0,000	*Complementary (Partial Mediation)*
Gen X	-0,008	0,044	0,965	*Direct-only (No Mediation)*
Gen Y	0,505	9,728	0,000	*Indirect Only (Full Mediation)*
Gen Z	0,057	0,275	0,784	*Direct-only (No mediation)*

Source: Data Analysis of Smart PLS

Hypothesis 7 states that herding behavior has a complementary partial mediating role on the effect of financial literacy on investment decisions. Financial literacy has a significant effect on herding behavior with a probability value of 0.000 and an original sample estimate of 0.819, and herding behavior has a significant effect on investment decisions with a probability value of 0.000 and an original sample estimate of 0.582. The direct effect of financial literacy on investment decisions is also significant with a probability value of 0.014 and an original sample estimate of 0.218, indicating a mediating role according to the analysis Hair Jr. et al. (2021). In Generation X, financial literacy has a significant effect on herding behavior (original sample estimate 0.793) but not significant on investment decisions (original sample estimate -0.010), while the direct effect of financial literacy on investment decisions is significant (original sample estimate 0.296), indicating mediation does not occur. In Generation Y, financial literacy has a significant effect on herding behavior (original sample estimate 0.861) and herding behavior has a significant effect on investment decisions (original sample estimate 0.587), but financial literacy has no significant direct effect on investment decisions, indicating full mediation. In Generation Z, financial literacy has a significant effect on Herding behavior (original sample estimate 0.951), but Herding behavior has no significant effect on investment decisions, while the direct effect of financial literacy on investment decisions is significant (original sample estimate 0.398), indicating no mediation.

Direct Effect. This study shows that financial literacy has a positive effect on financial inclusion, herding behavior, and investment decisions. Financial literacy measured through the dimensions of basic personal finance, financial management, saving and investment, and risk management is proven to increase financial inclusion in Generations X, Y, and Z. This is in accordance with behavioral finance theory which explores how psychological and behavioral factors influence individual financial decisions and financial markets. This is in accordance with behavioral finance theory which explores how psychological and behavioral factors influence individual financial decisions and financial markets (Ayu Santika, 2024). Financial literacy helps individuals manage personal finances more

effectively and rationally, reduces cognitive biases, and improves access to and use of financial services (Addinpujoartanto and Darmawan, 2020). Previous research also supports these findings, stating that financial literacy has a positive effect on financial inclusion (Goenadi *et al.*, 2022; Hasan *et al.*, 2021; Khan *et al.*, 2022; Nuryani and Israfiani, 2021). However, research results show that high financial literacy also increases herding behavior, which is the tendency to follow the majority's decision in investment. While financial literacy is expected to reduce behavioral bias, the reality is that financial decisions are often influenced by social and psychological factors (Abdurrahman and Oktapiani, 2020; Setiawan *et al.*, 2018). In Generation Y, herding behavior has a positive effect on investment decisions, while Generation X and Z tend to be more independent in making investment decisions even though they are still affected by herding behavior. This finding is consistent with behavioral finance theory which states that investors tend to make decisions based on emotions and cognitive biases rather than rational analysis (Addinpujoartanto and Darmawan, 2020). Previous research also shows that herding has a positive effect on investment decision making (Adielyani and Mawardi, 2020; Fatima and Sharma, 2021; Kanwal *et al.*, 2019; Karmacharya *et al.*, 2022; Kurz *et al.*, 2018).

Mediating Effect: This study found that financial inclusion mediates the effect of financial literacy on investment decisions in Generation X and Z in a complementary partial mediation. Although financial literacy has a significant direct influence on investment decisions, financial inclusion also makes a significant contribution, so both work together to improve investment decisions (Santika, 2024). Behavioral finance theory suggests that individuals often make financial decisions based on emotions and cognitive biases, but financial literacy helps reduce these biases and increase financial inclusion (Addinpujoartanto and Darmawan, 2020). In Generation Y, financial inclusion plays a full mediating role, where the influence of financial literacy on investment decisions must go through financial inclusion. This finding supports previous research showing that financial literacy improves financial inclusion and investment decisions (Goenadi *et al.*, 2022; Grohmann *et al.*, 2018). In addition, herding behavior also mediates the effect of financial literacy on investment decisions by partial complementary mediation. Although there is a direct effect of financial literacy on investment decisions, herding behavior also mediates this relationship, indicating that both play a role in the investment decision-making process (Abdurrahman and Oktapiani, 2020). In Generation X, financial literacy directly affects investment decisions without going through herding behavior. However, in Generation Y, herding behavior mediates the relationship between financial literacy and investment decisions, consistent with behavioral finance theory that reflects the psychological and social aspects of decision making (Addinpujoartanto and Darmawan, 2020). In contrast, for Generation Z, financial literacy influences investment decisions directly without mediating herding behavior, suggesting that this generation is more independent in making investment decisions. This finding is consistent with previous

research by Arriqoh & Zoraya, (2024) which states that herding behavior can mediate the effect of financial literacy on investment decisions.

The findings of this study have implications in understanding financial behavior and investment decision making, referring to the theories of Financial Behavior, Stimulus Organism Response (SOR), and Prospect Theory. Financial Behavior explains that herding behavior can be a mediator between financial literacy and investment decisions, emphasizing the importance of psychological and social factors in financial education. According to SOR, financial inclusion serves as a stimulus that influences investor behavior, with financial literacy and Herding behavior as organisms affected by the stimulus, influencing individual investment decisions. Herding creates social and psychological pressures that alter an individual's response to financial information, while financial literacy reflects an individual's knowledge that influences the decision-making process. Prospect Theory suggests that Herding behavior can lead to biases in risk perception and decision-making, making investors ignore fundamental information and rely on social signals, resulting in investment decisions that are not always rational or optimal.

Practically, the findings of this study highlight the importance of understanding how herding behavior mediates the effect of financial literacy on investment decisions, providing several practical implications. For Generation X, herding behavior does not mediate the relationship between financial literacy and investment decisions, suggesting that they are more independent and less influenced by social pressure. Generation X can utilize financial literacy for investment decisions that suit their needs and goals. For Generation Y, Herding behavior fully mediates the effect of financial literacy on investment decisions, suggesting they are more influenced by social pressure, despite having high financial literacy. Generation Y needs to raise awareness of the influence of herding and manage the associated risks. As for Generation Z, Herding behavior does not influence investment decisions, indicating a more independent preference. Generation Z can utilize financial literacy for independent and rational investment decisions. For investment managers, securities companies, and the Indonesia Stock Exchange, these findings suggest the need for financial education that not only focuses on financial literacy, but also on awareness of Herding behavior and strategies to overcome it through workshops, seminars, or training.

CONCLUSION

This study found that financial literacy has a positive influence on financial inclusion, herding behavior, and investment decisions in the Indonesian capital market, with variations in influence among generations X, Y, and Z. Generation X leverages financial literacy to self-manage investments, while Generations Y and Z show a tendency towards herding behavior that mediates the relationship between financial literacy and

investment decisions. Financial inclusion also plays a significant role, with Generation Z being most responsive to easy access to financial services. The findings highlight the importance of financial literacy and financial inclusion in driving better investment decisions, as well as the need for financial education approaches that consider herding behavior and generational factors. The limitations of this study include a relatively small sample size, so the prediction results may be less accurate than using a larger sample. In addition, this study only focuses on herding behavior as a psychological variable in the context of behavioral finance theory, while other psychological variables such as bias and emotions have not been studied. For future research, it is recommended to expand the scope of variables by considering additional factors such as investment experience, risk level, and personal preferences. Using different research methods or cross-disciplinary approaches may also provide more holistic insights into the dynamics of investment decision-making. It is hoped that future research can provide a deeper understanding of investment behavior across generations and contribute to the development of more effective investment strategies.

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