

Influence of Financial Literacy, Herding Behavior, and Risk Perception on Financial Behavior: Case Study in West Java, Indonesia

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ABSTRACT

This study investigates the influence of financial literacy, herding behavior, and risk perception on financial behavior in West Java, Indonesia, while examining the moderating role of financial literacy. Employing a quantitative approach, data were collected from 400 respondents through structured questionnaires and analyzed using Structural Equation Modeling (SEM). The results reveal that financial literacy significantly enhances financial behavior, mitigates the adverse effects of herding behavior, and strengthens the positive impact of risk perception. Herding behavior negatively affects financial behavior, while risk perception has a positive influence. The findings highlight the crucial role of financial literacy in promoting informed and independent financial decision-making, underscoring the need for targeted financial education initiatives. These insights provide valuable implications for policymakers, financial institutions, and educators aiming to improve financial well-being in Indonesia.

Keywords:

Financial Literacy,
Herding Behavior,
Risk Perception,
Financial Behavior,
Financial Education

INTRODUCTION

The financial behavior of individuals plays a crucial role in their overall economic well-being and financial stability. In an increasingly complex financial landscape, characterized by diverse investment options and evolving economic conditions, understanding the factors influencing financial behavior has become a pressing concern for policymakers, educators, and financial institutions. Financial behavior, encompassing saving, spending, borrowing, and investing decisions, significantly impacts individuals' ability to achieve their financial goals and secure long-term economic stability (Bhabha et al., 2014). Developing countries, including Indonesia, face unique challenges as their populations navigate rapid financial market developments and increased access to credit and investment tools. This context underscores the importance of examining the determinants of financial behavior to design targeted interventions.

Financial literacy has emerged as a critical factor in shaping financial behavior. It refers to the ability to understand and effectively apply financial knowledge to make informed decisions (Lusardi & Mitchell, 2007). Studies suggest that individuals with higher financial literacy are better equipped to manage their finances, avoid excessive debt, and make sound investment choices (Tambunan, 2019). In Indonesia, particularly in West Java, financial literacy levels vary significantly across socio-economic groups, influenced by education levels, access to information, and cultural norms. Despite government initiatives to improve financial education, the disparity in financial knowledge continues to challenge efforts to enhance financial behavior.

Herding behavior, another critical determinant, reflects the tendency of individuals to imitate the actions of others in financial decision-making, often ignoring their own analyses or the fundamental factors influencing markets. Herding behavior is prevalent in Indonesia's financial markets, particularly in regions like West Java,

where communal values and social influence are strong (Kaban & Linata, 2024). Such behavior can lead to suboptimal financial decisions, such as panic selling during market downturns or excessive speculation during economic booms. Understanding how herding behavior influences financial behavior is vital for mitigating its potential adverse effects on financial stability.

Risk perception, the subjective judgment individuals make about the severity and probability of risks, also significantly influences financial behavior. People's risk tolerance determines their willingness to invest in volatile assets or take financial risks for higher returns. In regions like West Java, cultural and socio-economic factors play a significant role in shaping risk perception. Traditional values often encourage risk aversion, which can limit participation in growth-oriented financial instruments (Gómez-Bull et al., 2023). Consequently, there is a need to explore how risk perception interacts with financial literacy and herding behavior to influence overall financial behavior in the region.

Despite the growing interest in improving financial literacy and promoting sound financial practices, many individuals in West Java continue to exhibit financial behaviors that undermine their economic well-being. High levels of debt, low savings rates, and limited participation in investment opportunities highlight the pressing need to address the factors influencing financial behavior in this region. Previous studies have examined these factors in isolation, but a comprehensive understanding of how financial literacy, herding behavior, and risk perception interact to shape financial behavior is lacking. This gap in the literature hinders the development of effective policies and interventions tailored to the unique socio-economic and cultural context of West Java.

This study aims to analyze the influence of financial literacy, herding behavior, and risk perception on financial behavior in West Java, Indonesia. By exploring the relationships between these factors, this research seeks to provide a nuanced understanding of the determinants of financial behavior in the region. The findings will contribute to the academic literature and inform policymakers, financial educators, and institutions in designing targeted strategies to enhance financial decision-making and promote economic stability in West Java.

Literature Review And Hypothesis Development

1. Financial Behavior

Financial behavior encompasses an individual's actions and decisions related to financial matters such as saving, investing, spending, and borrowing. According to behavioral finance theory, these behaviors are not always rational and are often influenced by psychological, social, and economic factors (Setiawan & Winarna, 2021). Understanding financial behavior is critical, as it impacts individuals' financial well-being and contributes to the broader economic stability of a region (Fernandes et al., 2014). In Indonesia, particularly in West Java, financial behavior varies significantly, reflecting the socio-economic diversity and cultural influences in the region.

2. Financial Literacy

Financial literacy is the ability to understand and effectively apply financial concepts, such as budgeting, investing, and managing debt. Research shows that individuals with higher financial literacy are better at making informed financial decisions, avoiding financial pitfalls, and achieving long-term financial goals (Lusardi

& Mitchell, 2014). In the Indonesian context, financial literacy programs have been implemented to address low financial literacy levels, yet challenges persist due to limited access to resources and educational disparities (Pangestu & Karnadi, 2020). Studies have consistently found a positive relationship between financial literacy and sound financial behavior (Hong Shan et al., 2023), emphasizing the importance of improving financial knowledge to promote financial well-being.

3. Herding Behavior

Herding behavior refers to the tendency of individuals to follow the actions of a group, often disregarding their own analysis or market fundamentals. This behavior is common in financial markets and is influenced by psychological factors such as fear of missing out and social conformity (Shiller, 2003). In West Java, communal values and a collectivist culture often reinforce herding tendencies in financial decision-making (Wang & Nuangjamnong, 2022). While herding can sometimes lead to positive outcomes, such as market stability during certain periods, it often results in irrational financial decisions that amplify market volatility (Kaban & Linata, 2024).

4. Risk Perception

Risk perception is an individual's subjective evaluation of the likelihood and impact of a risk. In finance, risk perception influences decisions related to investments, savings, and borrowing. Research indicates that individuals with high-risk aversion are less likely to invest in high-yield but volatile financial instruments (Pradikasari & Isbanah, 2018). Socio-economic factors, such as income levels, education, and cultural norms, significantly shape risk perception (Zhang et al., 2024). In Indonesia, traditional values often lead to conservative financial practices, with many individuals preferring low-risk options such as savings accounts over investments in stocks or mutual funds (Atif & Alam, 2024).

5. Hypothesis Development

Individuals with higher financial literacy are better equipped to manage their finances, make informed decisions, and achieve financial stability. Prior research suggests a strong positive relationship between financial literacy and sound financial behavior (Lusardi & Mitchell, 2007). Thus, we hypothesize: H1: Financial literacy positively influences financial behavior in West Java, Indonesia.

Herding behavior often leads to irrational financial decisions, such as speculative investments or panic-driven actions during market fluctuations (Shiller, 2003). In regions with strong communal values, like West Java, herding tendencies may exacerbate poor financial practices. Thus, we hypothesize: H2: Herding behavior negatively influences financial behavior in West Java, Indonesia.

Risk perception shapes individuals' financial decisions, particularly in terms of balancing potential rewards against perceived risks. A well-calibrated risk perception often leads to more prudent financial behavior (Hamdani & Khalifah, 2023). Thus, we hypothesize: H3: Risk perception positively influences financial behavior in West Java, Indonesia.

Higher financial literacy may mitigate the negative effects of herding behavior by equipping individuals with the knowledge and confidence to rely on their own analysis rather than following the crowd (Chabaefer & Qutieshat, 2024). Thus, we hypothesize: H4: Financial literacy moderates the effect of herding behavior on financial behavior in West Java, Indonesia.

Financial literacy can influence how individuals interpret and respond to risks, potentially enhancing the positive impact of risk perception on financial behavior (Putra, 2021). Thus, we hypothesize: H5: Financial literacy moderates the effect of risk perception on financial behavior in West Java, Indonesia.

METHOD

1. Research Design

This study employs a quantitative research approach to investigate the influence of financial literacy, herding behavior, and risk perception on financial behavior in West Java, Indonesia. A cross-sectional design was adopted to collect data from respondents at a single point in time, enabling an analysis of relationships between variables.

2. Population and Sample

The population for this study consists of individuals residing in West Java who are engaged in financial decision-making, such as saving, borrowing, or investing. A purposive sampling method was used to ensure participants represent a diverse range of socio-economic backgrounds, education levels, and financial experiences. The sample size was determined using the Slovin formula with a 95% confidence level, resulting in 400 respondents. This size is adequate to ensure statistical reliability and the robustness of the analysis.

3. Data Collection

Primary data for this study were collected through a structured questionnaire distributed to respondents both online and offline to ensure inclusivity and accessibility. The questionnaire was organized into four sections. The first section gathered demographic information, including age, gender, education level, income, and financial experience, to provide a comprehensive profile of the participants. The second section focused on financial literacy, measured using a standardized scale developed by (Lusardi & Mitchell, 2007), covering topics such as budgeting, investment, and risk management. This section aimed to assess respondents' knowledge and capability in managing financial resources effectively.

The third section addressed herding behavior, with items adapted from prior research (Shiller, 2003), examining participants' tendencies to follow group decisions in financial contexts. The fourth section evaluated risk perception, using a scale adapted from relevant literature to assess how respondents perceive and approach financial risks. Finally, the questionnaire measured financial behavior through a composite index that included savings, spending, borrowing, and investment practices. All responses were recorded on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), ensuring consistency in capturing participant attitudes and behaviors.

4. Data Analysis

The collected data were analyzed using Structural Equation Modeling (SEM) with statistical software, including SPSS and AMOS, due to SEM's capability to test relationships among multiple variables simultaneously and assess both direct and indirect effects. The analysis process began with a descriptive analysis to summarize the demographic characteristics of the respondents and the central tendencies of the study variables. Reliability and validity were tested using Cronbach's alpha to ensure internal consistency and Confirmatory Factor Analysis (CFA) to validate the

constructs. Model fit was assessed through indices such as the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and the Chi-Square/df ratio to confirm the adequacy of the proposed model. Finally, hypothesis testing was conducted by examining the significance of the paths between variables using standardized regression coefficients and p-values, providing insights into the relationships among financial literacy, herding behavior, risk perception, and financial behavior.

RESULTS AND DISCUSSION

1. Descriptive Statistics

The descriptive statistics of the study variables, including means, standard deviations, and ranges, are presented in Table 1. Financial literacy recorded a mean of 3.842 (SD = 0.652), indicating that respondents generally possess moderate to high levels of financial knowledge. Herding behavior scored a mean of 3.217 (SD = 0.713), suggesting a moderate tendency among respondents to follow group financial decisions. Risk perception had a mean of 3.486 (SD = 0.689), reflecting a balanced attitude toward financial risks. Financial behavior, with a mean of 3.911 (SD = 0.604), showed that respondents exhibit moderately prudent financial practices.

Table 1. Descriptive Statistics

Variable	Mean	Standard Deviation	Min	Max
Financial Literacy	3,842	0,652	2	5
Herding Behavior	3,217	0,713	1	5
Risk Perception	3,486	0,689	2	5
Financial Behavior	3,911	0,604	2	5

Source: Data Analysis, 2024

2. Reliability and Validity Testing

Cronbach's alpha values confirmed the internal consistency of all constructs, exceeding the threshold of 0.700. Confirmatory Factor Analysis (CFA) demonstrated satisfactory construct validity, with factor loadings for all items exceeding 0.700. The Average Variance Extracted (AVE) values were above 0.500, and Composite Reliability (CR) values exceeded 0.700 for all constructs, indicating adequate convergent validity.

Table 2. Reliability and Validity Analysis

Variable	Cronbach's Alpha	AVE	CR
Financial Literacy	0,872	0,564	0,890
Herding Behavior	0,811	0,532	0,845
Risk Perception	0,834	0,559	0,861
Financial Behavior	0,897	0,587	0,915

Source: Data Processed by Author, 2024

3. Model Fit Assessment

The SEM model fit indices met the recommended thresholds, confirming a good fit between the hypothesized model and the data. The Comparative Fit Index (CFI) was 0.957, the Root Mean Square Error of Approximation (RMSEA) was 0.047, and the Chi-Square/df ratio was 2.113, all indicating acceptable model fit.

4. Hypothesis Testing

The path coefficients and p-values for the hypothesized relationships are summarized in Table 3. Financial literacy showed a significant positive effect on

financial behavior ($\beta = 0.421$, $p < 0.001$), supporting H1. Herding behavior had a significant negative effect on financial behavior ($\beta = -0.274$, $p < 0.001$), supporting H2. Risk perception demonstrated a significant positive effect on financial behavior ($\beta = 0.318$, $p < 0.001$), supporting H3. Financial literacy significantly moderated the effects of herding behavior ($\beta = -0.112$, $p = 0.021$) and risk perception ($\beta = 0.145$, $p = 0.008$) on financial behavior, supporting H4 and H5, respectively.

Table 3. Hypothesis Testing Result

Path	Hypothesis	β	p-value	Result
Financial Literacy → Financial Behavior	H1	0,421	0,001	Supported
Herding Behavior → Financial Behavior	H2	-0,274	0,001	Supported
Risk Perception → Financial Behavior	H3	0,318	0,001	Supported
Financial Literacy × Herding Behavior	H4	-0,112	0,021	Supported
Financial Literacy × Risk Perception	H5	0,145	0,008	Supported

Source: Data Processed by Author, 2024

The results confirm that financial literacy positively influences financial behavior, while herding behavior negatively impacts it. Risk perception contributes positively to financial behavior. The moderating role of financial literacy highlights its potential to mitigate the adverse effects of herding behavior and enhance the positive impact of risk perception, underscoring the critical role of financial education in promoting sound financial decision-making.

Discussion

This study explores the influence of financial literacy, herding behavior, and risk perception on financial behavior among individuals in West Java, Indonesia. Additionally, it examines the moderating role of financial literacy in shaping the effects of herding behavior and risk perception on financial behavior. The findings provide valuable insights into the determinants of financial behavior and their implications for policymakers, educators, and financial institutions.

1. The Role of Financial Literacy

Financial literacy emerged as a significant positive determinant of financial behavior, aligning with prior studies (Atkinson & Messy, 2012; Putra, 2021). Respondents with higher financial literacy exhibited prudent financial practices, such as effective budgeting, saving, and informed investment decisions. This finding underscores the importance of financial education in equipping individuals with the knowledge and skills needed to navigate complex financial environments.

In the context of West Java, financial literacy appears particularly crucial given the region's diverse socio-economic landscape. Financially literate individuals are better prepared to adapt to economic changes, resist manipulative marketing, and avoid high-risk financial products. Policymakers and institutions should prioritize accessible financial literacy programs, targeting populations with limited financial education, such as rural communities or low-income groups.

2. Impact of Herding Behavior

Herding behavior negatively affects financial behavior, as individuals who conform to group financial decisions without critical analysis are more likely to make suboptimal choices. This finding corroborates earlier research (Shiller, 2003; Wang &

Nuangjamnong, 2022), which highlights the risks associated with herding in financial contexts, such as speculative bubbles and poor investment outcomes.

In West Java, herding behavior may be influenced by cultural norms that emphasize communal decision-making and conformity. While these values foster social cohesion, they can also lead to financial decisions driven by peer pressure rather than individual analysis. Financial education should therefore include components that encourage independent thinking and critical evaluation of financial advice. Additionally, financial institutions can play a role by promoting transparent communication and discouraging misleading group-oriented marketing practices.

3. Significance of Risk Perception

Risk perception positively influences financial behavior, suggesting that individuals who accurately assess financial risks are more likely to make sound financial decisions. This result is consistent with the findings of (Gómez-Bull et al., 2023; Kaban & Linata, 2024), which emphasize the role of risk perception in financial decision-making. In the West Java context, individuals with balanced risk perceptions demonstrate cautious yet proactive financial behaviors, such as diversifying investments and avoiding impulsive spending. However, excessive risk aversion can limit opportunities for financial growth. Financial literacy programs should aim to strike a balance, educating individuals on risk management strategies while dispelling misconceptions about financial risks.

4. Moderating Role of Financial Literacy

The moderating analysis reveals that financial literacy mitigates the adverse effects of herding behavior and amplifies the positive influence of risk perception on financial behavior. These findings highlight the transformative potential of financial education in shaping financial decision-making processes. By reducing susceptibility to herding, financial literacy empowers individuals to make independent financial choices based on rational analysis rather than social influence. This ability is particularly important in dynamic financial markets, where group behavior often leads to volatility and poor outcomes. Furthermore, the moderating effect on risk perception suggests that financial literacy enhances individuals' capacity to evaluate and respond to financial risks, leading to more effective risk management strategies.

5. Implications for Policy and Practice

The findings have significant implications for stakeholders aiming to improve financial well-being in West Java.

a. Policymakers

Governments and local authorities should integrate financial literacy into educational curricula at all levels, ensuring that individuals acquire basic financial skills early in life. Additionally, community-based programs can be tailored to address the unique challenges faced by specific demographics, such as farmers, small business owners, or informal sector workers.

b. Educational Institutions

Schools and universities should collaborate with financial experts to design engaging and practical financial education modules. Topics such as budgeting, savings, investment, and risk management should be emphasized, with real-world examples to enhance understanding and applicability.

c. Financial Institutions

Banks and other financial service providers should adopt transparent practices and offer financial advisory services to guide customers in making informed decisions. They can also sponsor financial literacy workshops and digital tools, such as budgeting apps, to facilitate financial planning.

d. **Community Leaders**

In culturally cohesive regions like West Java, community leaders play a pivotal role in shaping attitudes and behaviors. They can act as advocates for financial literacy, encouraging individuals to participate in educational initiatives and promoting awareness of the risks associated with herding behavior.

6. Theoretical Contributions

This study contributes to the theoretical understanding of financial behavior by integrating financial literacy as both an independent and moderating variable. The findings reinforce the significance of financial literacy in enhancing financial decision-making while addressing the contextual factors that influence financial behavior in a culturally diverse region. Additionally, the study expands the literature on herding behavior and risk perception, offering insights into their interactions with financial literacy.

7. Limitations and Future Research

Despite its contributions, this study has limitations that warrant consideration. First, the cross-sectional design limits the ability to infer causality between variables. Future research could adopt longitudinal designs to explore changes in financial behavior over time. Second, the sample is limited to West Java, which may restrict the generalizability of the findings to other regions in Indonesia or globally. Expanding the study to include diverse populations would provide a more comprehensive understanding of financial behavior determinants. Finally, while this study focuses on financial literacy, herding behavior, and risk perception, other factors such as psychological traits, socio-economic conditions, and technological adoption may also influence financial behavior. Future studies could adopt a more holistic approach, incorporating these additional variables to enrich the analysis.

CONCLUSION

This study demonstrates the significant influence of financial literacy, herding behavior, and risk perception on financial behavior in West Java, Indonesia. Financial literacy emerged as a critical factor, positively shaping financial behavior and moderating the effects of herding behavior and risk perception. Specifically, financial literacy reduces the negative impact of herding tendencies and enhances individuals' ability to manage financial risks effectively. The findings emphasize the importance of financial education in fostering independent, informed, and prudent financial decision-making. By addressing behavioral tendencies and cognitive perceptions, stakeholders—such as policymakers, educators, and financial institutions—can promote better financial outcomes and overall economic stability. Future research could expand on these findings by incorporating longitudinal data and exploring additional factors that influence financial behavior.

Reference

Atif, H., & Alam, Q. (2024). Exploring the Nexus between ESG disclosure and financial risk, exploring how transparent reporting shapes perceptions of risk and

- influences the decision-making process for investors. *Journal of Peace, Development and Communication*, 8(03).
- Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296–316.
- Bhabha, J. I., Khan, S., Qureshi, Q. A., Naeem, A., & Khan, I. (2014). Impact of financial literacy on saving-investment behavior of working women in the developing countries. *Research Journal of Finance and Accounting*, 13(5), 118–122.
- Chabaeffe, N. N., & Qutieshat, A. (2024). Financial Literacy, Financial Education and Financial Experience: Conceptual Framework. *International Journal of Economics and Financial Issues*, 14(4), 44–55.
- Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861–1883.
- Gómez-Bull, K. G., Ibarra-Mejía, G., & Vargas-Salgado, M. M. (2023). Risk perception in the construction industry: A literature review and future research directions. *Work*, 76(4), 1333–1344.
- Hamdani, N. A., & Khalifah, R. N. (2023). The Influence of Risk Perception on Business Model Innovation. *International Journal of Business, Economics, and Social Development*, 4(4), 238–245.
- Hong Shan, L., Cheah, K. S. L., & Leong, S. (2023). Leading Generation Z's financial literacy through financial education: Contemporary bibliometric and content analysis in China. *SAGE Open*, 13(3), 21582440231188308.
- Kaban, L. M., & Linata, E. (2024). The Risk Perception as a Mediator Between Herding and Overconfidence on Investment Decision by Gen Z in Indonesia. *MEC-J (Management and Economics Journal)*, 8(1), 1–14.
- Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement planning: New evidence from the Rand American Life Panel. *Michigan Retirement Research Center Research Paper No. WP*, 157.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5–44.
- Pangestu, S., & Karnadi, E. B. (2020). The effects of financial literacy and materialism on the savings decision of generation Z Indonesians. *Cogent Business & Management*, 7(1), 1743618.
- Pradikasari, E., & Isbanah, Y. (2018). Pengaruh financial literacy, illusion of control, overconfidence, risk tolerance, dan risk perception terhadap keputusan investasi pada mahasiswa di Kota Surabaya. *Jurnal Ilmu Manajemen (JIM)*, 6(4), 424–434.
- Putra, R. (2021). Financial literacy and risky investment decision making of millennials in Indonesia mediated by information search. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(10), 695–705.
- Setiawan, D., & Winarna, J. (2021). Effects of Indonesian Students' Financial Literacy on Financial Behavior. *Sixth Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2020)*, 553–558.
- Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *Journal of*

Economic Perspectives, 17(1), 83–104.

- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-018-0140-4>
- Wang, P., & Nuangjamnong, C. (2022). Determinant Factors of Overconfidence, Herding Behavior, and Investor Elements on Investment Decision Making in China. *Universal Journal of Financial Economics*, 23–42.
- Zhang, X., Chang, R., Wang, M., & Sui, X. (2024). The influence of driver's risk perception ability on driving decision-making: an ERP study. *Current Psychology*, 1–11.