

The Effect of Herding, Overconfidence, and Risk Tolerance on Investment Decisions

Laili Azka Isnaini¹, Mohammad Yunies Edward²

^{1,2} Management, Faculty of Economics and Business, Nahdlatul Ulama Islamic University of Jepara

*Corresponding Author – Email Address :

lailiazkaisnaini13@gmail.com¹, edward@unisnu.ac.id²

ABSTRACT

Introduction/Main Objectives: This research aims to analyze the influence of herding, overconfidence, and risk tolerance on investment decisions made by SMEs in Jepara. This topic is considered important because, in practice, SME investment choices are often influenced by psychological factors, not solely based on logical considerations or rational analysis. **Background Problems:** The increasing number of MSME actors in Jepara reflects significant local economic growth; however, their investment decisions are still largely influenced by psychological factors such as herding, overconfidence, and risk tolerance, rather than by objective financial considerations. **Novelty:** This study contributes to the literature by offering insights into investment behavior of SMEs, which has been relatively underexplored, as most existing research focuses on individual investors in the capital market. **Research Methods:** This study used a quantitative approach. The population involved SMEs in Jepara. The sampling technique used convenience sampling technique, and the data was analyzed through multiple linear regression with the Partial Least Square (PLS) approach, so that the sample obtained was 130 respondents. **Finding/Results:** This research reveals that overconfidence contributes positively to the investment decisions of SME actors. Meanwhile, the factors of herding behavior and risk tolerance do not exhibit a meaningful relationship with those investment decisions. **Conclusion:** The confidence factor of business actors plays an important role in determining investment decisions among SMEs in Jepara. Therefore, strengthening financial literacy and understanding psychological biases are necessary to ensure that investment decisions are made more logically and based on well-considered judgments.

ARTICLE INFO

Keywords:
Herding,
Overconfidence, Risk
Tolerance, Investment
Decisions, SMEs

1. Introduction

Investment plays a crucial role in supporting economic development in Indonesia. In the modern era, public awareness of the importance of investing has continued to grow. Investment is no longer an exclusive activity for large-scale entrepreneurs, but has extended to various segments of society, such as workers, university students, and even housewives (Azhari & Damingun, 2021). The government also recognizes the importance of investment as a driver of economic growth, particularly

in encouraging private sector involvement as capital owners in national economic development (Nugraha & Hendrati, 2023). The increasing participation of the public in investment is also driven by the perception that investment is a way to generate additional income in the future (Budiarto & Susanti, 2017). In general, investment is an activity of allocating capital in the form of assets to increase the capacity for producing goods or services, for the purpose of Generating future returns, investment serves as a means to enhance business working capital, improve the quality of production, expand output, and ultimately contribute to equitable economic growth (Nugraha & Hendrati, 2023).

On the other hand, SMEs represent one of the most promising sectors for development through investment, particularly in Jepara Regency. SMEs play a strategic role in promoting equitable welfare, creating employment opportunities, and strengthening the local economy (Widiastuti et al., 2022). According to data released by the Central Statistics Agency (BPS) of Jepara Regency, in the food and beverage sector, the number of SMEs has increased significantly—from 410 units in 2020 to 966 units in 2021, rising again to 1,243 units in 2022, and surging to 9,166 units in 2023. The existence of these enterprises reflects the creativity and potential of the local community in utilizing abundant natural resources to create high value-added products. With support from the local government through training programs, access to capital, and product promotion at local and national markets, this sector continues to grow significantly, making it one of the pillars of Jepara's economy.

Investors are required to have a comprehensive understanding of the potential risks that may arise from investment decisions. In general, investment is an effort to gain profit in the future. (Budiarto & Susanti, 2017). Herlina et al., (2020) explain that investment decisions involve the process of gathering information, analysis, and evaluation before committing capital. The information obtained by investors influences their perceptions and beliefs regarding a given investment opportunity (Afriani & Halmawati, 2019). In practice, many investors do not behave entirely rationally and tend to follow the decisions of other investors, a behavior known as herding. In addition to herding, other Psychological aspects play a role in shaping how individuals make investment choices, such as overconfidence when investors exhibit excessive self-confidence in their own abilities and risk tolerance, which refers to the level of an investor's willingness to face potential risks.

Herding is the tendency of individuals to follow accepting what others decide without reflecting on whether those decisions are correct or aligned with their business conditions. When business actors observe many people investing in a particular product, they tend to follow suit even without fully understanding the risks (Setiawan et al., 2018). This behavior commonly occurs because MSME actors fear being left behind or lack sufficient knowledge (Afriani & Halmawati, 2019). The influence of herding behavior on investment decisions has been demonstrated in research by (Afriani & Halmawati, 2019) and (Putri & Isbanah, 2020) which show the presence of herding behavior plays a significant role in encouraging certain investment decisions. However, these findings differ from those of (Pranyoto et al., 2020) who argue that herding has no influence on investment decisions.

Overconfidence refers to the condition in which SME actors become overly confident in their decision-making abilities, potentially leading them to overlook risks and fail to consider information objectively (Salerindra, 2020). As a result, they may make investment decisions that are misaligned with their business capacity (Pertiwi et al., 2019). On the other hand, insufficient confidence may cause business actors to hesitate and miss potentially valuable opportunities (Khairunizam & Isbanah, 2019). Research conducted by Khairunizam & Isbanah, (2019) and Pikulina et al., (2012) indicates that overconfidence has a positive influence on investment decisions. However, these findings contrast

with those of (Afriani & Halmawati, 2019) and (Rakhmatulloh & Asandimitra, 2019) who found that overconfidence does not have a significant effect on investment decisions.

As noted by Soleha, (2018) risk tolerance refers to The degree to which a person is prepared to tolerate potential losses or uncertainties of loss in investment activities. Investors with high risk tolerance tend to prefer investment instruments that offer the potential for high returns, even if they involve high risk. Conversely, investors with low risk tolerance are more inclined to choose safer investments, even if the returns are relatively small. Previous research have shown varying results regarding the relationship between risk tolerance and investment decisions. Based on findings by Lathifatunnisa & Wahyuni, (2021) risk tolerance contributes positively to investment decisions. However, this finding contradicts the results of a research by (Salvatore & Esra, 2021) which concluded that risk tolerance does not have a significant influence on investment decisions.

The issue addressed in this research is the limited number of research works that specifically examine the influence of herding, overconfidence, and risk tolerance on investment decisions among SME actors. In fact, SMEs possess characteristics that differ from individual investors, particularly in terms of experience, risk perception, and sources of information. Most previous research have focused on capital markets or individual investors, rather than considering SME actors as the main research subjects.

This research is important to enhance the understanding of financial behavior among MSME actors and to support financial literacy efforts. The findings of this research are expected to contribute not only to the development of behavioral finance theory but also to provide policy recommendations for local governments, financial institutions, and entrepreneurship training organizations

Methodologically, this research was conducted using a quantitative approach through a survey of MSME actors in the food and beverage sector in Jepara. Using a non-random sampling method with a convenience sampling approach, a total of 130 respondents who are business owners were obtained. The collected data were then analyzed using a multiple linear regression model to identify The Impact of Herding Behavior, Investor Overconfidence, and Risk Tolerance variables on investment decisions.

This research aims to examine and analyze the influence of herding behavior, overconfidence, and risk tolerance on the investment decisions made by SME actors in Jepara. The findings of this research are expected to contribute to helping SME actors make more logical and strategic investment decisions, as well as serve as a reference for the development of financial literacy and the formulation of investment policies in the SME sector.

2. Literature Review

Behavioral Finance Theory

Behavioral finance theory is an approach that describes how psychological and emotional aspects can influence an individual's behavior in making financial decisions, including investment activities. This theory emerged as a critique of the assumptions in traditional finance theory, which assumes that investors always act rationally, possess complete information, and are able to maximize profits optimally. However, in practice, many financial decisions are made irrationally. One of the key figures in the development of this theory is Daniel Kahneman and Amos Tversky, who introduced Prospect Theory in 1979. According to Ramashar et al., (2022) financial behavior reflects how investors in the real world make financial decisions that are not always logical. Therefore, behavioral finance theory serves as an important foundation for analyzing the behavior of MSME actors in investing, particularly in examining how the three psychological factors influence investment decisions in practice.

Investment Decisions

Investment decisions are an essential part of economic activity, especially for individuals and business actors seeking to grow capital and gain future profits. Herlina et al., (2020) explain that investment decisions involve a series of steps taken by investors to select investment instruments by considering available information. This information may include financial data, economic conditions, market trends, and other external factors that are deemed to influence investment outcomes. Investors assess assets or companies not only based on objective information but also through personal perceptions, interpretations, and expectations about the future.

Afriani & Halmawati, (2019) added that the same information may lead to different investment decisions among investors. This situation is caused by differences in knowledge, experience, and individual attitudes in responding to risks or opportunities. In other words, investment decisions are highly influenced by internal factors of the investor, such as the level of confidence, risk tolerance, and the tendency to follow the majority's opinion. In the context of SMEs, these factors become particularly relevant, as most SME actors do not fully rely on systematic financial analysis, but rather depend on intuition and experience.

Herding

Herding is one of the most common psychological behaviors observed in investment decision-making, where individuals tend to imitate or follow the investment decisions made by the majority of other investors (Afriani & Halmawati, 2019). This tendency is often triggered by social environmental influences, such as colleagues, communities, or business groups perceived to be more experienced or to possess more accurate information. Herding reflects the belief that following the actions of the majority is a safer and less risky option compared to making independent decisions.

Investment decisions tend to become less rational when they are no longer based on personal analysis of available data or information. Investors influenced by herding behavior rely more on the assumption that the decisions of a large group are more accurate than individual judgment (Rona & Sinarwati, 2021). Ramdani, (2018) also emphasized that individuals with a high level of herding have a strong tendency to follow other investors, particularly large groups perceived as credible sources of decision-making. In line with this, research by Afriani & Halmawati, (2019) and Fridana & Asandimitra, (2020) found that herding behavior has a positive influence on investment decisions. Based on these findings, the following hypothesis can be formulated:

H1: Herding has a positive influence on investment decisions

Overconfidence

Overconfidence refers to an individual's tendency to overestimate their abilities and knowledge, especially when making decisions that involve risk, such as in investment. Gozalie & Anastasia, (2015) state that a high level of self-confidence is generally normal; however, in the context of investing, this attitude often leads investors to overrate their ability to evaluate an asset's potential. As a result, investors become overly confident that their decisions will always yield profits, without objectively considering the associated risks. This behavior can potentially lead to overtrading and the neglect of risk signals that should be carefully analyzed (Pradikasari & Isbanah, 2018).

In practice, investors with a high level of overconfidence tend to make investment decisions hastily, driven by strong belief in their intuition and knowledge, even though they may lack sufficient experience or information (Rona & Sinarwati, 2021). Such behavior has the potential to lead to poor decision-making and increase the risk of financial loss, particularly for novice investors or small-scale business actors.

Addinpujoartanto & Darmawan, (2020) assert that overconfidence not only influences decision-making behavior but also affects an individual's psychological state when outcomes do not meet expectations. In line with this, the findings of Pradikasari & Isbanah, (2018) demonstrate that overconfidence has a positive effect on investment decisions, as individuals who are confident in their abilities tend to be more active and bold in making financial decisions. Based on these findings, the following hypothesis is proposed:

H2: Overconfidence has a positive influence on investment decisions

Risk Tolerance

Risk tolerance refers to an individual's ability and willingness to face potential losses when investing. The higher a person's risk tolerance, the greater their courage in making investment decisions (Listiani & Soleha, 2023). Investors with high risk tolerance generally tend to be more confident in making investment decisions compared to those with low risk tolerance. Some investors are willing to endure significant losses and even risk a large portion of their assets in pursuit of high returns. On the other hand, some investors are more cautious, willing to take only minimal risks even if the potential returns are limited (Pujiyanto & Mahastanti, 2013).

The research conducted by (Wulandari & Iramani, 2014) showed that investors with a high level of risk tolerance tend to be more courageous in making investment decisions. This finding is consistent with the results of (Yohnson, 2008) who stated that risk tolerance is one of the key factors that positively influences individual investment decisions. Based on previous research, the hypothesis in This research outlines the following formulation:

H3: Risk tolerance contributes positively to investors' decision-making.

3. Method, Data, and Analysis

This research employs a quantitative approach aimed at assessing the influence of herding, overconfidence, and risk tolerance on investment decisions made by Small and Medium Enterprises (SMEs) in Jepara Regency. The population of this research includes all SMEs operating in the food and beverage industry sector, totaling 9,166 business units based on data from the Central Statistics Agency (BPS) of Jepara Regency in 2023. The sampling technique used is non-probability sampling with a convenience sampling approach, namely the selection of respondents based on easy access by researchers (Etikan, 2016). This technique was chosen due to limitations in resources and time, as well as the convenience of reaching SME actors who were willing to participate as respondents. A total of 130 respondents were successfully collected.

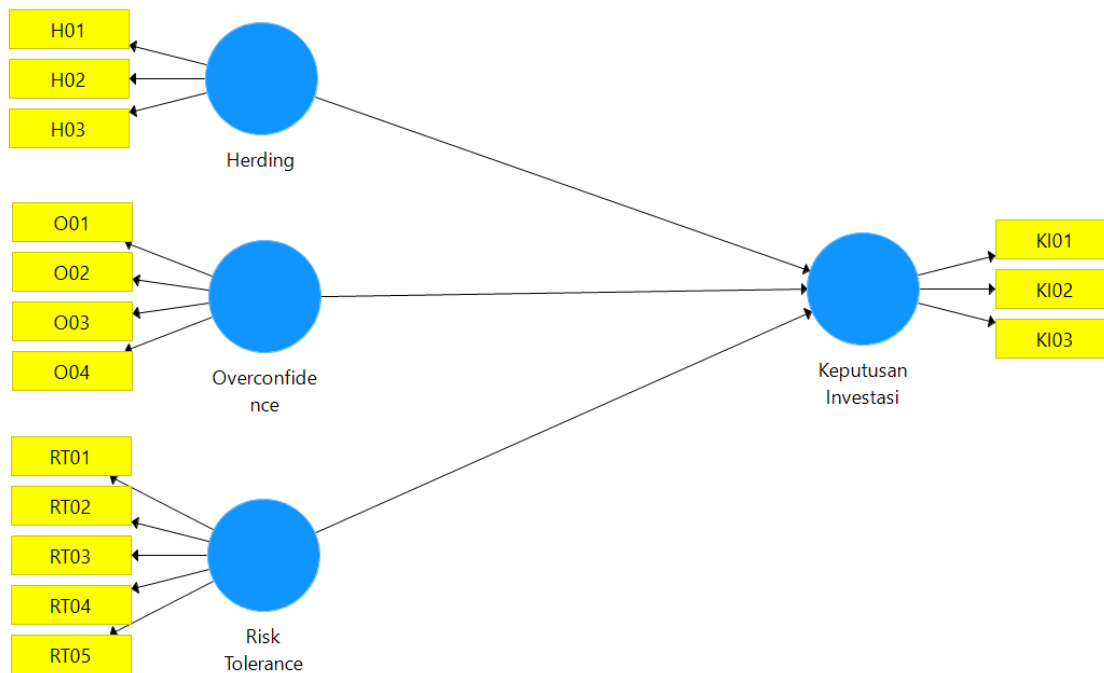
Data collection was carried out by distributing questionnaires to SME actors. The questionnaire was designed using a five-point Likert scale to assess respondents' perceptions of each indicator of the variables studied. The collected data are primary data, completed directly by SME owners or managers who are familiar with investment activities within their businesses. This research also outlines the variables used, the operational definitions of each variable, and the indicators employed in the analysis, as presented in Table 1.

Tabel 1. Variables and Definitions

Variable	Operational Definition	Indicators
Herding (X1)	Herding refers to investor behavior in which they follow other investors as role models or primary sources of influence, based on the previous performance of their investments.	<ol style="list-style-type: none"> 1. Dependence on majority decisions 2. Influence from other investors 3. Social pressure and imitation of others' investment gains <p>(Rona & Sinarwati, 2021)</p>
Overconfidence (X2)	Overconfidence occurs when investors excessively believe that they have greater capability and understanding compared to the average investor.	<ol style="list-style-type: none"> 1. Confidence in making the right choices 2. Confidence in analytical ability 3. Confidence in investment knowledge 4. Confidence in gaining profits <p>(Ramashar et al., 2022)</p>
Risk Tolerance (X3)	Risk tolerance refers to the extent to which an individual is willing and able to accept and take on risk in investment activities.	<ol style="list-style-type: none"> 1. Ability to accept investment risks 2. Willingness to invest in high-risk assets 3. Investing using debt 4. Prioritizing returns over safety 5. Not perceiving risk as always leading to loss <p>(Listiani & Soleha, 2023)</p>
Investment Decision (Y)	Investment decision is defined as an action taken by an individual to allocate a certain amount of money or capital into various investment instruments with the expectation of future returns.	<ol style="list-style-type: none"> 1. Tendency to invest 2. Selection of investment type 3. Consideration of risks and returns in investing <p>(Zahida, 2021)</p>

In this study, the data analysis technique was carried out using the SEM (Structural Equation Modeling) method with the Partial Least Square (PLS) approach. The testing stages used to ensure and assess the overall quality employed values such as Average Variance Extracted (AVE > 0.5), Cronbach's Alpha (> 0.7), and Composite Reliability (> 0.7). In addition, the R-Square value was used to reflect the strength of the influence of independent factors on the dependent variable. The T-test was used to test the proposed hypotheses, and the relationships between factors were evaluated based on the applied construct structure. These results can be seen in Figure 1

Figure 1. Conceptual Framework



4. Result and Discussion

Description of Respondents

The research results section obtained descriptive data about respondents, presented in table 2:

Table 2. Respondent Profile

Profile	Category	Frequency	Percentage
Gender	Male	49	37,69%
	Female	81	62,31%
Age	20-30 years	52	40,00%
	31-40 years	57	43,85%
	41-50 years	21	16,15%
Type of Business	Food	77	59,23%
	Drink	53	40,77%
Has Investment	Yes	130	100%
	No	-	-

Source: Processed by the Researcher, 2024

The selected respondents were SMEs focusing on food and beverage businesses located in the Jepara region, with a total of 130 respondents serving as the research sample. Based on the research findings, the majority of respondents were female, totaling 81 individuals or 62.31%. In terms of age characteristics, the age group of 31–40 years had the highest number of investors, with 57 respondents or 43.85%. The most dominant business type was in the food sector, with 77 respondents or 59.23%. All 130 respondents reported making investments, representing 100% participation in investment activities.

Validity and Reliability

The validity test is carried out to measure the extent to which the instrument reflects the concept under study, the reliability test measures the consistency of the measurement results, while the R-Square is to determine how much the independent variables are able to explain the dependent variations in the model.

Table 3. Validity and Reliability Test

Variable	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	R-Square
<i>Herding</i>	0,813-0,876	0,800	0,883	0,715	
<i>Overconfidence</i>	0,771-0,892	0,838	0,892	0,675	
<i>Risk Tolerance</i>	0,784-0,849	0,837	0,891	0,672	0,666
Investment Decisions	0,710-0,879	0,735	0,850	0,656	

Source: Processed Data using Smart-PLS 3.0 (2024)

In this research, discriminant validity was evaluated using the Average Variance Extracted (AVE) value. If the AVE value exceeds 0.50, it can be concluded that each variable has adequate discriminant validity. Based on the data in Table 3, all constructs show AVE values above 0.50, indicating that the requirement for convergent validity has been met. This demonstrates that each indicator within the construct has a high correlation. In addition, discriminant validity was also assessed through cross-loading values, all of which exceeded 0.70. This indicates that each indicator has a higher correlation with its own construct than with other constructs. Therefore, it can be concluded that the instrument used in this research possesses strong discriminant validity.

Construct reliability in this research was measured using the composite reliability value. If the value exceeds 0.70, the construct is considered to have high reliability. Based on Table 3, all construct indicators show composite reliability values above 0.70, indicating that the instrument used in this research is reliable. In addition, the R-Square value for the investment decision variable is recorded at 0.666. This means that 66.6% of the variation in investment decisions can be explained by the three independent variables herding, overconfidence, and risk tolerance while the remaining 33.4% is explained by other factors outside the scope of this research model.

Hypothesis Testing

Hypothesis testing is carried out to determine whether there is a relationship or influence between variables that have been formulated previously.

Tabel 4. Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
<i>Herding -> Investment Decisions</i>	0,120	0,123	0,117	1,022	0,307
<i>Overconfidence -> Investment Decisions</i>	0,544	0,558	0,133	4,096	0,000

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Risk Tolerance -> Investment Decisions	0,194	0,184	0,148	1,315	0,189

Source: Processed Data using Smart-PLS

Based on the results of the hypothesis testing presented in Table 4, the herding variable shows a t-statistic value of $1.022 < 1.657$ and a p-value of $0.307 > 0.05$. This indicates that herding has no significant effect on investment decisions. Meanwhile, the overconfidence variable has a t-statistic of $4.096 > 1.657$ and a p-value of $0.000 < 0.05$, which means that overconfidence has a positive influence on investment decisions. For the risk tolerance variable, the t-statistic is recorded at $1.315 < 1.657$, with a p-value of $0.189 > 0.05$. This indicates that risk tolerance does not have a significant effect on investment decisions.

Effect of Herding on Investment Decisions

The findings of this study indicate that the herding variable has no significant effect on the investment decisions of SMEs in Jepara. This result is consistent with previous findings by Setiawan et al. (2018), which also states that herding behavior does not always appear in investment decisions. In the perspective of behavioral finance, herding is associated with the informational cascade phenomenon, which is a condition in which individuals tend to follow the actions of others due to the limited information they have (Bikhchandani et al., 1992). Although most SMEs in this study acknowledged the influence of the social environment, such as the tendency to follow the decisions of the majority or imitate the success of other businesses, this influence did not directly lead them to make similar investment decisions. Instead, the investment decisions made by SMEs are based more on internal business needs, such as the need for new production equipment, expansion of business premises, or an increase in production capacity. This shows that they tend to consider strategic aspects and real needs rather than simply following trends among other businesses. The business experience that SMEs already have is an important factor in reducing the tendency towards herding behavior. With experience and a better understanding of business dynamics, SMEs have become more rational and selective in absorbing external information. They remain aware of general trends in the business environment, but do not necessarily make it the basis of decisions if it is not relevant to the internal conditions of their business. This finding is reinforced by Wulandari and Bowo (2018), who state that SMEs focus more on internal factors such as profit projections, cost efficiency, and capital requirements rather than simply imitating the behavior of other businesses. This is in line with the argument in behavioral finance theory that the level of herding can decrease with the increase in financial experience and self-awareness of investors in making decisions. According to Setiawan et al., (2018), individuals who feel they have enough information and experience will usually not easily follow the actions of other investors, because they have their own preferences and strategies that are more measurable.

Effect of Overconfidence on Investment Decisions

The results of this study indicate that the overconfidence variable has a positive effect on the investment decisions of SMEs in Jepara. This finding is in line with behavioral finance theory, which emphasizes that financial decisions are not always made rationally, but are often influenced by cognitive biases, one of which is overconfidence (Kahneman & Tversky, 1979). This behavior arises

when individuals overestimate their abilities and knowledge in analyzing and predicting investment returns, so they tend to ignore risks that actually need to be taken into account objectively. In SMEs, a high level of confidence in personal ability to understand investments encourages businesses to be more active in making investment decisions, even in instruments with greater risk. This confidence provides a psychological impetus to allocate funds for business development more aggressively. This shows that overconfidence can be a trigger for more proactive investment behavior, despite the risks. This finding is reinforced by (Aristiwati & Hidayatullah, 2021) who found that investors with high levels of overconfidence have a tendency to be more active and confident in making financial decisions because they believe their own competence will generate profits. In practice, SMEs that tend to run their businesses independently or within the family also exhibit characteristics of overconfidence. They generally make business decisions quickly, based on intuition, experience, and personal beliefs, and rely less on opinions or information from other parties. This is in line with the concept of self-attribution bias in behavioral finance, where individuals tend to attribute the success of past decisions to their own abilities, thus increasing confidence in the future. This research is also in line with the opinion of Glaser & Weber (2015), which states that individuals with high levels of overconfidence will be more active in investment activities because they feel able to make the right decisions based on their expertise and knowledge. In the short term, this behavior can encourage innovation and business growth, but on the other hand, it still needs to be balanced with an increase in risk literacy so that the decisions made remain rational and sustainable.

Effect of Risk Tolerance on Investment Decisions

The results showed that risk tolerance has no effect on investment decisions of SMEs in Jepara. This finding is in line with the results of Hidayat (2022), which states that the low effect of risk tolerance on investment decisions can be caused by the unstable level of emotional maturity of respondents. Under these conditions, business actors tend to make investment decisions without comprehensive risk considerations. According to the behavioral finance perspective, risk tolerance should influence the extent to which an individual is willing to accept uncertainty in financial activities. However, in practice, investment decisions by SMEs are more influenced by short-term operational needs. This reflects that even though individuals have a high level of risk tolerance, their investment decisions are not necessarily aggressive when faced with limited capital, income fluctuations, and business continuity pressures. In addition, the conservative approach in making decisions also reflects the prudent attitude typical of the SME sector, where business actors tend to prioritize operational stability over risky expansion. This finding is reinforced by Novitasari and Husna's (2021) research which shows that in the context of small businesses, investment decisions are driven more by short-term needs and business urgency, not solely by the extent to which individuals are prepared to face risks. Thus, risk tolerance is not a dominant factor in the investment decisions of SMEs. Their decisions are more determined by realistic and practical considerations, such as financial conditions, production continuity, and income sustainability. This confirms that within the framework of behavioral finance, the influence of psychological factors such as risk tolerance can be minimized by contextual pressures that are economic and operational in nature.

5. Conclusion and Suggestion

The research findings indicate that the investment decisions of Small and Medium Enterprise (SME) actors are influenced by various internal and psychological factors, such as personal experience, business needs, and confidence in their own abilities. SME actors tend to make investment decisions

independently not merely by following trends or others' choices but by focusing on business development, such as improving product quality, expanding operations, or purchasing production equipment. High self-confidence and business intuition also drive them to take strategic steps in investing. This suggests that psychological aspects, such as overconfidence, play a role in the decision-making process. Therefore, it is essential for SME actors to continuously enhance their financial literacy in order to make more rational and long-term investment decisions. Support from the government and related institutions is also needed, particularly in the form of training, access to information, and easier access to capital, to strengthen SMEs' contribution to regional economic growth

It is recommended that SME owners improve their understanding of psychological biases such as overconfidence, which can potentially influence investment decisions. To address this, participating in training or workshops on rational decision-making is highly encouraged, so they can better understand the risks associated with decisions based on excessive personal confidence. Additionally, conducting more in-depth and objective market analysis before making investment decisions is essential. By utilizing valid data and information, SME owners can make more strategic decisions and reduce their reliance on others' opinions. From a theoretical perspective, further research is needed to explore other factors that may influence investment decisions, such as macroeconomic factors, market behavior, and individual investor characteristics. This is necessary to gain a deeper understanding of investment behavior among SME owners. Moreover, the development of more complex theoretical models is needed to comprehend the interaction between various psychological and behavioral factors in investment decision-making. These models should include additional variables that may contribute to investment decisions, thereby providing a more holistic view. Conducting comparative research among SME owners in different regions or industrial sectors may also offer insights into how local contexts influence their investment decisions.

6. Acknowledgement

All forms of support provided by various parties throughout the research process have served as a vital foundation for the completion of this scientific article. The author sincerely appreciates the role of Nahdlatul Ulama Islamic University of Jepara for offering academic guidance and research facilities. Respectful appreciation is also extended to the MSME actors in Jepara Regency for their willingness to participate as respondents. The time and contributions they voluntarily provided were highly meaningful and had a significant impact on the success of this research. The author is also deeply grateful for the insights and guidance offered by lecturers and resource persons, whose valuable input greatly assisted the writing process of this article.

7. References

- Afriani, D., & Halmawati. (2019). Pengaruh Cognitive Dissonance Bias, Overconfidence Bias Dan Herding Bias Terhadap Pengambilan Keputusan Investasi (Studi Empiris Pada Mahasiswa Fakultas Ekonomi Universitas Negeri Padang Yang Melakukan Investasi Di Bursa Efek Indonesia). *Jurnal Eksplorasi Akuntansi*, 1(4), 1650–1665.
- Aristiwati, I. N., & Hidayatullah, S. K. (2021). Pengaruh Herding Dan Overconfidence Terhadap Keputusan Investasi (Studi Pada Nasabah Emas Kantor Pegadaian Ungaran). *Jurnal Among Makarti*, 14(1).
- Azhari, R., & Damingun. (2021). *Pengaruh Bias Representative terhadap Keputusan Investasi di Pasar Modal* (Vol. 2, Issue 2).

- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades. In *The Journal of Political Economy* (Vol. 100, Issue 5). <http://ssrn.com/abstract=1286306><http://www.journals.uchicago.edu/loi/jpe>Electroniccopyavailable at:<https://ssrn.com/abstract=1286306>
- Budiarto, A., & Susanti. (2017). Pengaruh Financial Literacy, Overconfidence, Regret Aversion Bias, Dan Risk Tolerance Terhadap Keputusan Investasi (Studi Pada Investor Pt. Sucorinvest Central Gani Galeri Investasi Bei Universitas Negeri Surabaya). *Jurusan Manajemen Fakultas Ekonomi Universitas Negeri, 05(02)*, 1–9.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5(1)*, 1. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fridana, I. O., & Asandimitra, N. (2020). Analisis Faktor Yang Memengaruhi Keputusan Investasi (Studi Pada Mahasiswi Di Surabaya). *Jurnal Muara Ilmu Ekonomi Dan Bisnis, 4(2)*, 396. <https://doi.org/10.24912/jmieb.v4i2.8729>
- Gozalie, S., & Anastasia, N. (2015). Pengaruh Perilaku Heuristics dan Herding Terhadap Pengambilan Keputusan Investasi Properti Hunian. *Finesta, 3(1)*, 1–5.
- Herlina, Hadiano, B., Winarto, J., & Suwarno, N. A. N. (2020). The Herding and Overconfidence Effect on the Decision of Individuals to Invest Stocks. *Journal of Economics and Business, 3(4)*, 1386–1397.
- Khairunizam, & Isbanah, Y. (2019). Pengaruh Financial Literacy Dan Behavioral Finance Factors Terhadap Keputusan Investasi (Studi Terhadap Investor Saham Syariah Pada Galeri Investasi Syariah Uin Sunan Ampel Surabaya). In *Jurnal Ilmu Manajemen* (Vol. 7). www.ekonomisyariah.org
- Lathifatunnisa, & Nur Wahyuni, A. (2021). Pengaruh Faktor Demografi, Risk Tolerance Dan Overconfidence Terhadap Pengambilan Keputusan Investasi Mahasiswa Di Kota Pekalongan. *Jurnal Bisnis Terapan, 5(2)*, 203–216. <https://doi.org/10.24123/jbt.v5i2.4688>
- Listiani, E., & Soleha, E. (2023). Literasi Keuangan, Risk Tolerance dan Overconfidence Terhadap Keputusan Investasi pada Pekerja di Kawasan Industri Cikarang. *Journal of Management and Bussines (JOMB), 5(2)*, 983–993. <https://doi.org/10.31539/jomb.v5i2.6271>
- Nugraha, D. M., & Hendrati, I. M. (2023). Analisis Pengaruh Tenaga Kerja UKM, Investasi UKM, dan Ekspor UKM Terhadap Pertumbuhan Ekonomi di Indonesia . *Jurnal Ekombis Review, 11(1)*, 777–786.
- Pertiwi, T. K., Yuniningsih, Y., & Anwar, M. (2019). The biased factors of investor's behavior in stock exchange trading. *Management Science Letters, 9(6)*, 835–842. <https://doi.org/10.5267/j.msl.2019.3.005>
- Pikulina, E., Renneboog, L., & Tobler, P. N. (2012). Overconfidence and Investment: An Experimental Approach. In *Florence Workshop on Behavioral and Experimental Economics*.
- Pranyoto, E., Susanti, & Septiyani. (2020). Herding Behavior, Experienced Regret Dan Keputusan Investasi Pada Bitcoin. *Jurnal Bisnis Darmajaya, 06(01)*, 29–43.
- Pujiyanto, N., & Mahastanti, L. A. (2013). *Regret Aversion Bias Dan Risk Tolerance Dalam Keputusan Investasi*. www.warsidi.com/2009/11

- Putri, R. A., & Isbanah, Y. (2020). Faktor-Faktor Yang Memengaruhi Keputusan Investasi Pada Investor Saham Di Surabaya. *Jurusan Manajemen Fakultas Ekonomi, 8*(1), 197–209.
- Rakhmatulloh, A. D., & Asandimitra, N. (2019). Pengaruh Overconfidence, Accounting Information, Dan Behavioural Motivation Terhadap Keputusan Investasi Di Kota Surabaya. In *Jurnal Ilmu Manajemen* (Vol. 7).
- Ramashar, W., Hanifa Sandri, S., Hidayat, R., Studi Akuntansi, P., Ekonomi dan Bisnis, F., Muhammadiyah Riau, U., & Studi Keuangan Perbankan, P. (2022). Faktor Psikologi dan Keputusan Investasi Mahasiswa di Pasar Modal. *Jurnal Riset Akuntansi Dan Keuangan, 10*(1), 93–102. <https://doi.org/10.17509/jrak.v10i1.36709>
- Ramdani, F. N. (2018). *Analisis Pengaruh Representativeness Bias Dan Herding Behavior Terhadap Keputusan Investasi (Studi Pada Mahasiswa Di Yogyakarta)*.
- Rona, I. W., & Sinarwati, N. K. (2021). Pengaruh Herding Bias dan Overconfidence Bias terhadap Pengambilan Keputusan Investasi. *Studi Akuntansi Dan Keuangan Indonesia, 4*(2).
- Salerindra, B. (2020). Determinan Keputusan Investasi Mahasiswa Pada Galeri Investasi Perguruan Tinggi Di Surabaya Dan Malang. In *Jurnal Ilmu Manajemen* (Vol. 8).
- Salvatore, T., & Esra, M. A. (2021). Pengaruh Overconfidence, Herding, Regret Aversion, Dan Risk Tolerance Terhadap Pengambilan Keputusan Investasi Investor. *Jurnal Manajemen, 10*(1), 48–56.
- Setiawan, Y. C., Atahau, A. D. R., & Robiyanto. (2018). Cognitive Dissonance Bias, Overconfidence Bias dan Herding Bias dalam Pengambilan Keputusan Investasi Saham. *Accounting and Financial Review, 11*, 17–25.
- Widiastuti, A., Khajar, I., & Ghoniyah, N. (2022). Hikmah knowledge capture insolvency on MSME responsibility and financial performance. *Jurnal Siasat Bisnis, 31–48*. <https://doi.org/10.20885/jsb.vol27.iss1.art3>
- Wulandari, A. D., & Iramani, R. (2014). Studi Experienced Regret, Risk Tolerance, Overconfidance Dan Risk Perception Pada Pengambilan Keputusan Investasi Dosen Ekonomi. In *Journal of Business and Banking* (Vol. 4, Issue 1).
- Yohnson. (2008). *Regret Aversion Bias dan Risk Tolerance Investor Muda Jakarta dan Surabaya*.
- Zahida, A. B. (2021). *Peran Literasi Keuangan, Risk Tolerance, Dan Risk Perception Terhadap Keputusan Investasi Mahasiswa*.