

The Influence of Behavioral Factors on Investment Decisions Among Cryptocurrency Investors in Jepara Regency

Rayhan Ferdinan Mualief¹, Bara Zaretta², Pradana Jati Kusuma³, Suhita Whini Setyahuni⁴

¹⁻⁴Universitas Dian Nuswantoro, Indonesia
rayhanferdinandddd@gmail.com

Abstract

This research aims to examine and analyze the influence of loss aversion, risk perception, overconfidence, and herding behavior on investment decisions among cryptocurrency investors in Jepara. A quantitative research design was adopted in this study, utilizing non-probability sampling through a purposive sampling approach. The research subjects comprised cryptocurrency investors residing in Jepara who participate in local or international crypto communities and are actively involved in investment activities. Structural Equation Modeling (SEM) assisted by Smart-PLS software was employed as the primary data analysis technique, encompassing validity testing, reliability testing, collinearity testing, path coefficient analysis, and R-square testing. Findings from this research demonstrate that loss aversion, risk perception, and herding behavior each produce a positive and significant impact on investment decisions as the outcome variable, while overconfidence does not have a significant effect on investment decisions. These findings carry several implications. Practically, investors are encouraged to strengthen independent fundamental, narrative, and technical analysis rather than relying primarily on market crowds or social media sentiment. From a policy perspective, educational institutions and investor communities are expected to provide continuous investment education to help investors make more independent and rational decisions. This study is limited by the use of purposive community-based sampling, a predominantly male and young respondent profile, and a cross-sectional self-reported survey design, which may restrict the generalizability and causal interpretation of the findings. Future studies should employ more diverse, probability-based samples across multiple regions, including investors outside cryptocurrency communities, using longitudinal or mixed-method designs for a more comprehensive understanding.

Keywords: behavioral finance, overconfidence, loss aversion, herding behavior, risk perception, investment decision

Introduction

Digital assets that utilize cryptographic technology and blockchain infrastructure as the foundation of transaction security are known as cryptocurrency, which operates in a decentralized manner without relying on a central authority such as a central bank (Cai, Xue, and Zhou 2024). These assets enable peer-to-peer transactions transparently and relatively quickly, yet are widely recognized for their high level of price volatility compared to conventional financial instruments (Vasudeva 2023). Over the past decade, crypto assets have grown significantly as one of the alternative investment instrument options, driven by the rapid advancement of blockchain technology and the increasing ease of public access to various digital-based investment platforms (Attri, Gupta, and Singh 2025). Furthermore, the widespread adoption of cryptocurrency is also shaped by factors such as perceived usefulness, social influence, and financial literacy, which collectively reduce perceived financial risk and encourage broader participation in decentralized financial systems (El Chaarani et al. 2024).

In Indonesia, the phenomenon of cryptocurrency investment growth has shown a highly significant upward trend over the past few years. According to Bappebti, the number of registered cryptocurrency investors in Indonesia stood at 11.2 million at the end of 2021 (Bappebti 2022). By September 2024, the number had increased significantly to 21.27 million investors, while the total value of cryptocurrency transactions reached IDR 426.69 trillion (Kementerian Perdagangan 2024). This growth in the investor count indicates that crypto assets are increasingly accepted by the public as one of the alternative investment instruments in the digital era.

A similar growth trend is also reflected at the regional level, particularly in Central Java. Based on digital market demographic data, the Java and Bali regions dominate crypto asset ownership in Indonesia with a share of 77.6% (Pasardana. 2026). This growth is dominated by the productive age group, namely 18–34 years old, which accounts for more than 80% of total crypto asset investors. The high participation of this age

group is influenced by the ease of access to digital technology and the significant influence of social media as the primary source of investment information and reference.

Within Central Java, Jepara Regency emerges as a particularly compelling context for the study of cryptocurrency investor behavior, primarily due to its substantial productive-age population. According to Badan Pusat Statistik (BPS) data, as of 2023 Jepara Regency recorded a total population of 1.26 million people, of whom 812,180 (64.22%) belonged to the productive age group (15–64 years) (Databoks. 2024). This proportion is significant because national data show that cryptocurrency investment in Indonesia is overwhelmingly dominated by young, productive-age individuals. according to Bappebti, more than 60% of Indonesia's 21.27 million crypto investors as of September 2024 were aged 18–30, with 26.9% aged 18–24 and 35.1% aged 25–30 (Kompas.id. 2024). Given that Jepara's productive-age population constitutes nearly two-thirds of its total residents, the region possesses a demographic structure that closely mirrors the national profile of active crypto investors, indicating strong latent potential for cryptocurrency adoption. Although no official data specifically quantifies the number of cryptocurrency investors in Jepara Regency, the convergence of a large productive-age population, increasing digital connectivity, and the broader national trend of young-investor-driven crypto growth suggests that cryptocurrency adoption in Jepara is a real and continuously expanding phenomenon that is relevant to examine scientifically.

The characteristics of the crypto market, which has high volatility and rapidly moving information, make investment decision-making not entirely based on rational considerations, but also influenced by various psychological aspects and investor behavior (Özçelik and Kurt 2024). Within this framework, the behavioral finance approach is highly appropriate for explaining how behavioral biases such as loss aversion, risk perception, overconfidence, and herding behavior influence investment decision-making, particularly in high-risk assets such as crypto (Makarchuk, Granovska, and Makarchuk 2023); (Masood 2024). The phenomenon of loss aversion refers to the tendency of investors who prioritize avoiding losses over pursuing gains, while risk perception reflects how individuals assess the level of risk subjectively, which often differs from actual risk (KAMBERI and HAXHIMUSTAFA 2024). On the other hand, according to Herlina et al. (2020) overconfidence drives investors to overestimate their own abilities and knowledge, while herding behavior causes investors to tend to follow the direction of the majority group's decisions without conducting deeper analysis. Various international studies indicate that these four aspects play a considerably important role in shaping and influencing investment decisions in modern financial markets, especially in instruments with high volatility such as crypto (Mosina and Ševčenko 2024). Nevertheless, the majority of previous research has remained concentrated on stock markets or developed country environments, so studies that integrate these four behavioral biases among crypto investors at the local level, particularly in Indonesia, are still relatively limited (Sestino, Rossi, and Faggioni 2026).

Given these circumstances, a gap in the existing research has been identified in the form of limited studies that simultaneously examine the influence of loss aversion, risk perception, overconfidence, and herding behavior on cryptocurrency asset investment decisions, particularly in the context of local investors in Indonesia. Research that specifically examines crypto investors at the regional level, such as Jepara Regency, is still very limited. Thus, this research aims to address that gap in the literature by examining how four behavioral biases affect the investment choices of crypto investors in Jepara. Aligned with this purpose, this study formulates the following research questions: The first question: How does loss aversion influence investment decisions among cryptocurrency investors in Jepara? The second question: How does risk perception influence investment decisions among cryptocurrency investors in Jepara? The third question: How does overconfidence influence investment decisions among cryptocurrency investors in Jepara? The fourth question: How does herding behavior influence investment decisions among cryptocurrency investors in Jepara?

Based on the problem formulation described above, this study aims to examine simultaneously and partially the influence of loss aversion, risk perception, overconfidence, and herding behavior on investment decisions among cryptocurrency investors in Jepara Regency, so that it is expected to contribute empirically in enriching the development of behavioral finance studies in the context of crypto asset investment at the local level in Indonesia.

Literature Review

Behavioral finance provides the general theoretical perspective of this study by explaining that investment decisions may deviate from the assumptions of complete rationality. Investors process financial information through cognitive judgments, emotional responses, previous experiences, and social influences. In the

cryptocurrency market, these behavioral mechanisms become particularly relevant because investors face high price volatility, rapidly changing information, and considerable uncertainty. Therefore, this study specifically examines loss aversion, risk perception, overconfidence, and herding behavior as behavioral factors that may influence cryptocurrency investment decisions.

Loss Aversion & Investment Decision

Loss aversion, a fundamental concept of Prospect Theory proposed by Kahneman and Tversky (1979) and incorporated within the broader framework Behavioral Finance Theory, dictates that individuals experience the pain of a financial loss far more intensely than the pleasure of an equivalent gain. This asymmetric psychological valuation heavily distorts how investors execute market entries, exits, and holding periods.

note that loss aversion shapes risk preferences by leading individuals to avoid decisions that could result in losses, while Tian (2024) through prospect theory that loss aversion causes investors to focus more heavily on potential losses than gains. Xu (2025) finds that in the volatile crypto market, loss aversion drives investors to limit risk-taking. Given the characteristics of crypto investors in Jepara Regency who are relatively cautious and sensitive to potential losses, loss aversion is considered a key factor shaping their investment decisions, leading to the following hypothesis:

H1: Loss aversion has a significant effect on investment decisions among cryptocurrency investors in Jepara.

Risk Perception & Investment Decision

The theoretical relationship between risk perception and investment decisions is based on Risk Perception Theory, particularly the psychometric perspective introduced by Slovic (1987), and is complemented by Prospect Theory. Risk perception refers to an individual's subjective judgment regarding the uncertainty, probability, and severity of possible negative consequences. Therefore, investors may perceive the same investment risk differently even when they receive identical market information.

Vera Kristanti Dewi and Gede Sri Diwya (2024) reveal that risk perception positively influences cryptocurrency investment decisions, as investors remain willing to invest despite being aware of high risks due to expectations of large returns. This aligns with Safitri (2025) who found that risk perception shapes investor preferences and decisions, particularly among novice crypto investors who weigh risk before investing. Given the high volatility of the crypto market, risk perception is considered a primary consideration in investors' decision-making, the following hypothesis is formulated:

H2: Risk perception has a significant effect on investment decisions among cryptocurrency investors in Jepara.

Overconfidence & Investment Decision

The relationship between overconfidence and investment decisions is grounded in Overconfidence Bias Theory within the behavioral finance framework. Overconfidence represents a cognitive bias in which individuals overestimate the accuracy of their knowledge, analytical skills, and ability to predict future market movements. At the same time, overconfident investors tend to underestimate uncertainty and the possibility that their assessments may be incorrect.

Syarkani and Tristanto (2022) state that overconfidence has been proven to have a positive influence on cryptocurrency investment decision-making, overconfident investors tend to believe they possess greater expertise and knowledge than others, thereby relying more on their personal abilities and analysis in making investment decisions. Naveed and Taib (2021) also found that overconfidence has a significant influence on investment decisions, where overconfident investors have a higher tendency to ignore external information and prioritize their independent judgment and analysis. Given the characteristics of crypto investors in Jepara Regency who are increasingly active and confident in investing, the following hypothesis is formulated:

H3: Overconfidence has a significant effect on investment decisions among cryptocurrency investors in Jepara.

Herding Behaviour & Investment Decision

The relationship between herding behavior and investment decisions can be explained through Informational Cascade Theory developed by Welch, Bikhchandani, and Hirshleifer (1992). This theory proposes that individuals who make decisions sequentially may use the observable actions of earlier decision-makers as a source of information. When the perceived information contained in other individuals' actions is considered stronger than one's private information, an individual may ignore personal analysis and follow the behavior of the group.

The research of Putradia & Ratnawati (2025) show that herding behavior has a positive and significant influence on cryptocurrency investment decisions, indicating that investors' asset choices are shaped by the choices of others. Furthermore, research by Salim, Sari, and Sulastris (2025) find that herding behavior positively influences crypto investment decisions among millennial investors, with preferences more driven by other investors' actions. Taking into consideration the characteristics of crypto investors in Jepara Regency who have strong social bonds and are active in communities, herding behavior is considered to have a positive impact on cryptocurrency investment decision-making, the following hypothesis is formulated:

H4: Herding behavior has a significant effect on investment decisions among cryptocurrency investors in Jepara.

The proposed conceptual framework based on the hypothesis has been depicted in Figure 1.

Method

This research seeks to offer empirical insights into how loss aversion, risk perception, overconfidence, and herding behavior influence cryptocurrency investment decisions among investors in Jepara. In order to deepen more comprehensive knowledge, this study develops a conceptual model that connects the four behavioral biases with investment decisions using the PLS-SEM approach, so that it is expected to enrich the behavioral finance literature within the setting of crypto markets in developing nations.

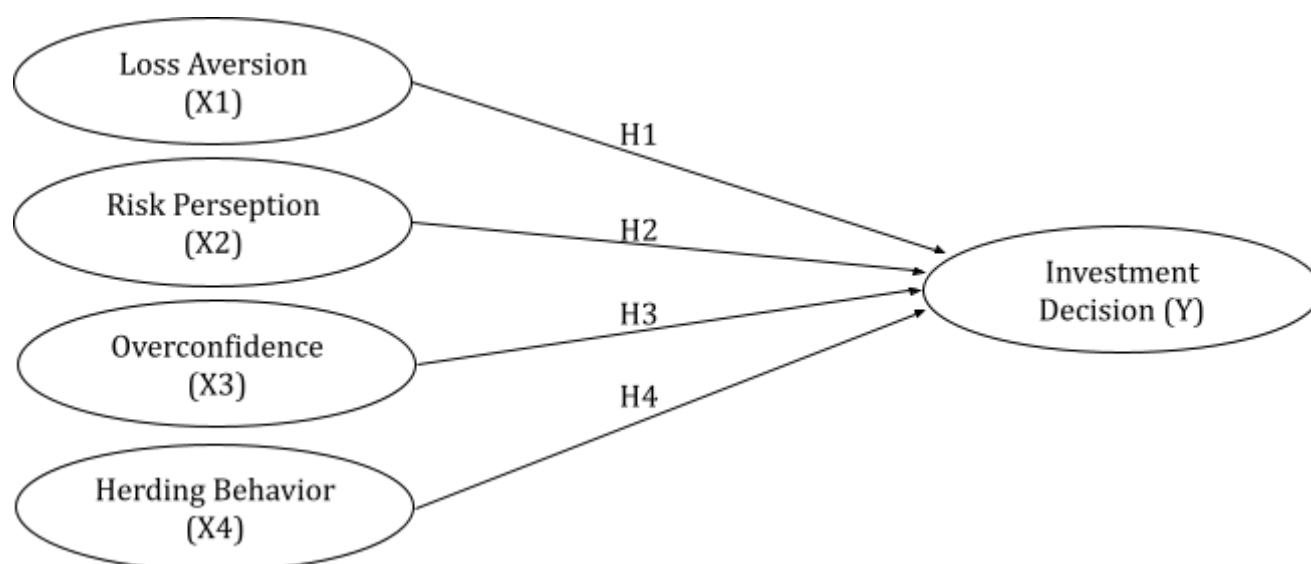


Figure 1. Research Model
Source: (Hossain and Siddiqua 2022)

This research adopts a quantitative approach, specifically utilizing a survey design to gather data. The population used in this study encompasses all cryptocurrency investors domiciled in Jepara. Sample determination was carried out through purposive sampling technique with respondent criteria consisting of cryptocurrency investors domiciled in Jepara, at least 18 years of age, and members of either local or global crypto communities.

The questionnaire was distributed online utilizing the Google Form application as a data collection tool, in order to facilitate the distribution process to respondents who meet the characteristics established in the study. The statement items in the questionnaire were constructed by adapting indicators from various previous studies and measured using a Likert scale. To examine the connections between variables while simultaneously evaluating the validity and reliability of the research constructs, data analysis was performed by applying the Partial Least Squares-based Structural Equation Modeling (PLS-SEM) approach.

Referring to Hair, T. Hult (2022), the recommended sample size for PLS-SEM is 5 to 10 times the number of indicators. With 20 indicators in this study, the ideal sample size ranges from 100 to 200 respondents. The target number of respondents established in this study is a total of 109 people. A total of 130 responses were initially collected, but 21 were excluded after data screening for not meeting the respondent criteria. The exclusion criteria included respondents who were not affiliated with or actively involved in any cryptocurrency

community, respondents who provided inconsistent or randomly patterned answers, and respondents who were not domiciled in Jepara. After this filtering process, 109 valid responses remained for analysis. The value scale applied in this questionnaire is based on Taherdoost (2019), which uses a 5-point Likert scale, where a score of 1 (strongly disagree), score 2 (disagree), score 3 (neutral), score 4 (agree), and score 5 (strongly agree). The questionnaire in this study is divided into four sections. The first section covers demographic aspects, the second section discusses respondent characteristics, the third section measures behavioral factors or emotional biases, and the final section examines investment decisions. Overall, the questionnaire consists of 31 questions, which include 6 questions regarding demographics, 5 questions related to respondent characteristics, 16 questions regarding behavioral factors or emotional biases, and 4 questions regarding investment decision-making. Table 1 below shows the statements for each variable and Table 2 shows the demographic profile of the respondents.

Table 1. statements for each variable

Variable	Statements	Source
Loss Aversion(X1)	1. A large loss in cryptocurrency investment feels heavier to me than the regret of missing an opportunity to gain large profits. 2. A significant price decline in the crypto assets I have invested in makes me worried. 3. I tend to hold back from adding new investments when the crypto market is experiencing a downward trend (bearish). 4. I will not sell my crypto assets when their value declines (cut loss), even though selling them could reduce losses.	(Hossain and Siddiqua 2022)
Risk perception(X2)	1. I do not hesitate to immediately sell my crypto assets that have generated adequate profits. 2. I tend to reconsider investing in crypto assets that show unexpected price fluctuations or transaction volume. 3. I tend to avoid crypto assets that have a poor trading performance history. 4. I do not consider crypto trading activity as something interesting.	(Hossain and Siddiqua 2022)
Overconfidence(X3)	1. I am more confident in my own cryptocurrency investment decisions than the advice or choices of other investors. 2. I make all of my cryptocurrency investment decisions independently and do not rely on others. 3. I am confident that my expertise and experience enable me to generate consistent profits in the crypto market. 4. I believe that I am capable of achieving success in the crypto market, where many other investors fail.	(Hossain and Siddiqua 2022)
Herding behavior(X4)	1. My cryptocurrency investment choices are influenced by the crypto assets being discussed in the Indonesian crypto community as well as in global crypto communities such as (Akademi Crypto, Trade With Suli, Twitter community, etc.). 2. I tend to invest in crypto assets that currently have high transaction volumes, which indicates that many investors are interested in those crypto assets. 3. My decision to sell or buy crypto assets is influenced by what the majority of other investors are currently doing (buy/sell). 4. I tend to respond quickly to changes in other investors' decisions and monitor their reactions to the crypto market.	(Hossain and Siddiqua 2022)
Investment Decision(Y)	1. I will always limit the amount of money I invest in crypto to avoid significant losses. 2. I will only buy crypto assets after conducting in-depth narrative and technical analysis. 3. I will avoid investing in crypto assets that are experiencing an unreasonable price increase (bubble). 4. I will make cryptocurrency investment decisions based on the opinions of other investors.	(Al-mansour 2020)

Source: Indicators adapted from (Hossain and Siddiqua 2022) and (Al-mansour 2020)

Results and Discussion

Table 2 shows that respondents are predominantly male (96%) and aged 18–30 (64%), with most holding a Bachelor's degree (53%). Private sector employees form the largest occupational group (29%), and 42% earn Rp 3,000,000–5,000,000 monthly. All respondents are based in Jepara Regency, active crypto investors, and members of crypto communities. Most have 1–3 years of investment experience (55%), and Bitcoin is the dominant asset of choice (74%), followed by Solana (11%) and Ethereum (6%).

This profile suggests that crypto investors in Jepara are largely young, educated, and digitally literate individuals in their productive years. Their relatively high education level and active community involvement reflect familiarity with digital innovation and openness to alternative investments. Meanwhile, their moderate experience level and strong preference for Bitcoin indicate a tendency toward established, well-known assets rather than higher-risk alternatives.

Table 2. Respondent Profile (n=109)

Variable	Category	Frequency	Percentage
Gender	Male	105	96%
	Female	4	4%
Age (in years)	18-30	70	64%
	31-40	35	32%
	41-50	4	4%
	>50	0	0%
Latest Education	Junior high school	0	0%
	Senior High School	35	32%
	Diploma (D1/D2/D3)	16	15%
	Bachelor's Degree (S1)	58	53%
	Postgraduate (S2/S3)	2	2%
Occupation	Student	25	23%
	Private Sector Employee	32	29%
	Self-Employed / Entrepreneur	26	24%
	Civil Servant / Military / Police	8	7%
	Professional (Doctor, Consultant, etc.)	7	6%
	Housewife	1	1%
	Full Time Trader	8	7%
	Other	2	2%
Monthly Income	<Rp 3.000.000	40	37%
	Rp 3.000.000 - Rp 5.000.000	46	42%
	Rp 5.000.000 - Rp 10.000.000	18	17%
	>Rp 10.000.000	5	5%
Domicile	Jepara Regency	109	100%
	Other	0	0%
Actively Investing in Crypto	Yes	109	100%
	No	0	0%
Investment Experience	<1 year	29	27%
	1 year - 3 years	60	55%
	>3 years	20	18%
Largest Crypto Allocation	Bitcoin	81	74%
	Ethereum	6	6%
	Solana	12	11%
	BNB	2	2%
	Other	8	7%
Membership in Crypto Community	Yes	109	100%

No 0 0%

Source: Data processed by researcher (2026)

The measurement model evaluation serves as the initial stage carried out in the analysis process as an effort to confirm the the validity and reliability of all constructs employed in this research. To evaluate convergent validity, this study examined the factor loading values, composite reliability, and Average Variance Extracted (AVE) of each construct. Meanwhile, discriminant validity testing was carried out by utilizing the Heterotrait–Monotrait (HTMT) ratio. Complete details regarding the results of these tests are presented and can be referred to in Tables 3 & 4.

Table 3. Measurement Model Result

Constructs	Items	Factor Loading	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Loss Aversion	LA1	0.861	0.886	0.921	0.745
	LA2	0.872			
	LA3	0.869			
	LA4	0.849			
Risk Perception	RP1	0.872	0.869	0.911	0.719
	RP2	0.868			
	RP3	0.827			
	RP4	0.823			
Overconfidence	OC1	0.925	0.875	0.924	0.801
	OC2	0.844			
	OC3	0.914			
Herding	HR1	0.894	0.913	0.939	0.793
	HR2	0.868			
	HR3	0.900			
	HR4	0.899			
Investment Decision	ID1	0.885	0.909	0.936	0.785
	ID2	0.888			
	ID3	0.906			
	ID4	0.864			

Source: Data processed by researcher (2026)

Referring to Table 3, Every indicator across the various constructs show factor loading values above 0.70, ranging from 0.823 to 0.925. This indicates that each indicator has met the adequate convergent validity criteria as it has surpassed the 0.70 baseline recommended in the guidelines (Hair, T. Hult 2022). For all constructs, Cronbach's alpha values fall between 0.869 and 0.913, while the composite reliability values span from 0.911 to 0.939, thereby consistently surpassing the 0.70 benchmark. Therefore, a highly adequate level of internal reliability can be confirmed across all constructs used in this study. In addition, the Average Variance Extracted (AVE) values for each variable range from 0.719 to 0.801, which have surpassed the minimum threshold of 0.50. Referring to the PLS-SEM measurement model evaluation standards outlined by Hair, T. Hult (2022), these overall results indicate that all constructs used have successfully met the required convergent validity and reliability criteria.

Table 4. Heterotrait-Monotrait (HTMT)

	HR	ID	LA	OC	RP
HR					
ID	0.636				
LA	0.057	0.524			
OC	0.090	0.194	0.137		
RP	0.091	0.461	0.180	0.174	

Source: Data processed by researcher (2026)

Referring to Table 4, all Heterotrait–Monotrait Ratio (HTMT) values obtained for each pair of constructs in this study do not exceed the threshold of 0.90. These results provide evidence that the model used in this study

has been proven to meet the required discriminant validity standards, in line with the evaluation standards (Hair, T. Hult 2022).

Table 5. VIF Value (Inner Model)

	VIF
Herding Behavior -> Investment Decision	1.012
Loss Aversion -> Investment Decision	1.003
Overconfidence -> Investment Decision	1.013
Risk Perception -> Investment Decision	1.012

Source: Data processed by researcher (2026)

Table 6. VIF Value (Outer Model)

Items	VIF
HR1	3.895
HR2	2.970
HR3	3.842
HR4	3.391
ID1	4.090
ID2	3.292
ID3	4.540
ID4	3.009
LA1	2.590
LA2	3.280
LA3	2.694
LA4	3.179
OC1	3.562
OC2	1.797
OC3	3.332
RP1	3.183
RP2	3.299
RP3	2.992
RP4	2.975

Source: Data processed by researcher (2026)

Based on Tables 5 and 6, the Variance Inflation Factor (VIF) testing reveals that all VIF values in the inner model are around 1.003–1.013, while in the outer model they range from 1.797–4.540. All of these values do not exceed 5, These results demonstrate that the model does not suffer from multicollinearity, thereby validating its suitability for further analytical testing. aligning with the standards (Hair, T. Hult 2022).

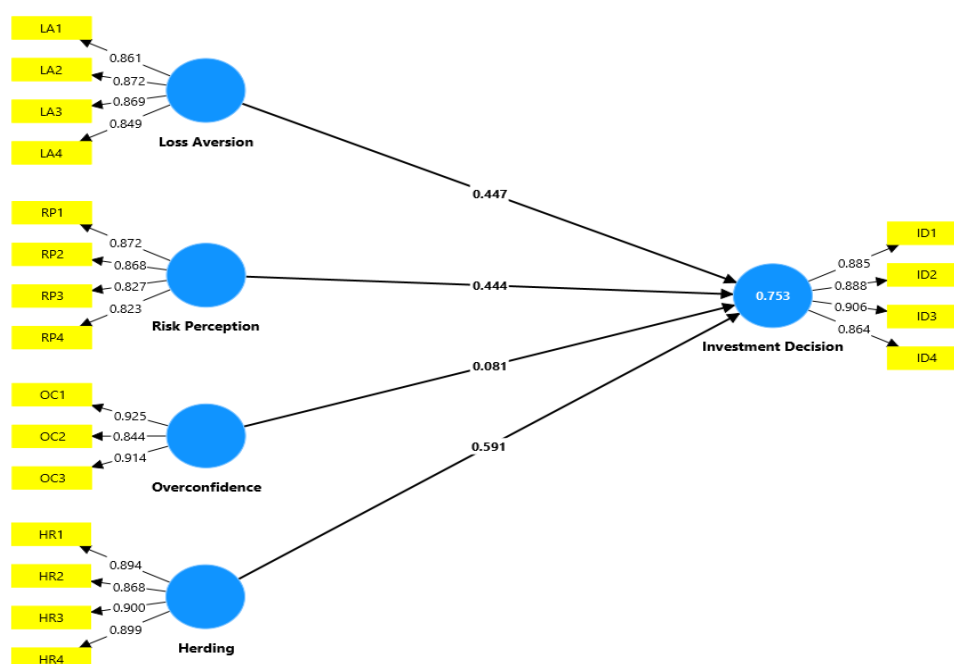


Figure 2. Structural Model Results
Source: Data processed by researcher (2026)

Table 7. Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Herding Behavior->Investment Decision	0.591	0.590	0.055	10.778	0.000
Loss Aversion -> Investment Decision	0.447	0.444	0.051	8.741	0.000
Overconfidence -> Investment Decision	0.081	0.082	0.048	1.693	0.091
Risk Perception -> Investment Decision	0.444	0.444	0.055	8.135	0.000

Source: Data processed by researcher (2026)

As can be seen from the path coefficient test in Table 7, it can be found that the Herding Behavior variable shows a significant positive relationship with Investment Decision ($\beta = 0.591$; $t = 10.778$; $p < 0.001$), so the hypothesis regarding this relationship is accepted. Furthermore, Loss Aversion also shows a significant positive relationship with Investment Decision ($\beta = 0.447$; $t = 8.741$; $p < 0.001$). The Risk Perception variable also shows a significant positive relationship with Investment Decision ($\beta = 0.444$; $t = 8.135$; $p < 0.001$). Meanwhile, Overconfidence ($\beta = 0.081$; $t = 1.693$; $p = 0.091$) indicates that the influence of the variable is statistically insignificant, as the test results show a t-statistic value < 1.96 and p-value > 0.05 . Referring to the structural model evaluation criteria according to Hair, T. Hult (2022), a relationship is accepted as statistically significant when the t-statistic value surpasses 1.96 at a 5% significance level, or when the p-value is smaller than 0.05. Conclusively, while Herding Behavior, Loss Aversion, and Risk Perception emerged as powerful determinants of Investment Decisions, Overconfidence failed to exert any meaningful statistical impact within the current framework.

Table 8. R² and R² Adjusted

Dependent Variable	R-square	R-square adjusted
Investment Decision	0.753	0.743

Source: Data processed by researcher (2026)

Referring to Table 8, the Investment Decision variable obtains an R-square (R²) value of 0.753 and an adjusted R-square of 0.743. This indicates that the Herding Behavior, Loss Aversion, Overconfidence, and

Risk Perception variables together are able to contribute in explaining the Investment Decision variable by as much as 75.3%, while the remaining 24.7% proportion represents the contribution of other variables outside the scope of this research model. This figure reflects that the explanatory power of this research model is categorized as strong, in accordance with the structural model evaluation standards within the PLS-SEM analysis framework (Hair, T. Hult 2022)

Table 9. Accepted and Rejected Hypothesis

Hypothesis	Status
H1: Loss aversion has a significant effect on investment decisions among cryptocurrency investors in Jepara.	Accepted
H2: Risk perception has a significant effect on investment decisions among cryptocurrency investors in Jepara.	Accepted
H3: Overconfidence has no significant effect on investment decisions among cryptocurrency investors in Jepara.	Rejected
H4: Herding behavior has a significant effect on investment decisions among cryptocurrency investors in Jepara.	Accepted

Source: Data processed by researcher (2026)

The Influence of Loss Aversion on Investment Decision-Making Among Cryptocurrency Investors in Jepara Regency

The results of hypothesis testing (H1) show that loss aversion has a positive and significant effect on investment decision-making among cryptocurrency investors in Jepara Regency, supporting the hypothesis. This suggests that investors who are more sensitive to potential losses tend to make more selective decisions and restrict the amount of capital allocated to their investments. This aligns with the respondent profile, where most investors favor Bitcoin a relatively established and lower-risk asset compared to other cryptocurrencies as a way to minimize potential losses while still participating in the crypto market.

This finding supports Prospect Theory proposed by Kahneman and Tversky (1979), which explains that individuals perceive losses more intensely than gains of the same magnitude. Given the high volatility of cryptocurrency markets, loss-averse investors tend to weigh potential losses more heavily, making them more careful in deciding whether to buy, hold, or sell crypto assets.

This outcome aligns with the results of Xu (2025) which reveals that in the volatile crypto market, loss aversion drives investors to limit risk-taking, which is ultimately reflected in investment decisions that tend to be conservative.

The Influence of Risk Perception on Investment Decision-Making Among Cryptocurrency Investors in Jepara Regency

The results of hypothesis testing (H2) show that risk perception has a positive and significant effect on investment decision-making among cryptocurrency investors in Jepara Regency, supporting the hypothesis. As most respondents are young investors with one to three years of experience, their exposure to the highly volatile crypto market has made them aware of the potential risks involved. Rather than discouraging investment, this risk awareness becomes an important factor in evaluating potential returns and shaping investment decisions.

Risk perception is a subjective assessment shaped by individual experience, beliefs, and psychological traits rather than purely objective data (Slovic 1987). In the cryptocurrency market, where high risk is often paired with high potential returns, investors who possess greater awareness of market risks may become more attentive in evaluating investment opportunities. Rather than discouraging participation, risk awareness serves as an important consideration in the decision-making process.

This outcome aligns perfectly with what was discovered by Vera Kristanti Dewi and Gede Sri Diwya (2024) which reveals that risk perception is shown to act as a positive driver of cryptocurrency investment decision-making, where investors remain willing to invest despite being aware of the high risks due to large return expectations.

The Influence of Overconfidence on Investment Decision-Making Among Cryptocurrency Investors in Jepara Regency

The results of hypothesis testing (H3) show that overconfidence does not have a significant influence on investment decision-making among cryptocurrency investors in Jepara Regency, leading to the rejection of the

hypothesis. This may be explained by respondents' moderate investment experience (one to three years), which may not be sufficient to develop strong overconfidence. Additionally, their active involvement in cryptocurrency communities likely encourages them to consider external information and market analyses rather than personal judgment alone.

While Behavioral Finance Theory identifies overconfidence as a common bias that leads investors to overestimate their knowledge and underestimate risk, this study's results suggest that investors in Jepara Regency do not rely solely on self-confidence. Instead, they appear to weigh other factors such as perceived risk, potential losses, and community-derived information when making decisions. Given the volatility and unpredictability of crypto markets, investors may recognize the limits of their own knowledge and avoid decisions based purely on self-confidence.

This result is not consistent with the findings of Syarkani and Tristanto (2022) and Naveed and Taib (2021) which found that overconfidence has a positive and significant influence on investment decision-making. These studies suggest that investors with higher levels of self-confidence tend to rely more on their personal knowledge, expertise, and judgment when making investment decisions, while placing less emphasis on external information.

The Influence of Herding Behavior on Investment Decision-Making Among Cryptocurrency Investors in Jepara Regency

The results of hypothesis testing (H4) confirm that herding behavior has a positive and significant effect on investment decision-making among cryptocurrency investors in Jepara Regency. This indicates that investors are influenced by the behavior of other investors and crypto communities in selecting, buying, and selling their assets, consistent with the respondent profile of active community members with moderate investment experience who tend to rely on others' analyses.

This finding is well supported by Welch, Bikhchandani, and Hirshleifer (1992). Under conditions of high volatility and information uncertainty, investors may use the opinions and actions of cryptocurrency communities as substitutes for independent analysis. The fear of missing out on potential gains may further strengthen the tendency to follow assets that are being widely discussed, actively traded, purchased, or sold by other investors.

This result aligns closely with the outcomes reported by Putradia and Ratnawati (2025) and Salim et al. (2025) who similarly found that herding behavior positively and significantly influences crypto investment decisions, with investors often following market participants' actions rather than relying on their own analysis.

Conclusion

This study investigates how loss aversion, risk perception, overconfidence, and herding behavior influence cryptocurrency investment decisions in Jepara Regency. Using PLS-SEM analysis, results show that loss aversion, risk perception, and herding behavior significantly and positively affect investment decisions, meaning investors tend to avoid losses and consider risk before making investment decisions, while at the same time also paying attention to the behavior and decisions of other investors in the market in determining their investment decisions. Meanwhile, the overconfidence variable is not proven to have an influence on investment decisions, indicating that excessive self-confidence is not a primary factor influencing investors in determining their investment decisions.

The high influence of herding behavior suggests that most crypto investors in Jepara Regency tend to follow others' decisions rather than conducting independent analysis. This condition shows that the level of investor literacy and knowledge regarding cryptocurrency in the region still needs to be improved. Therefore, relevant parties such as educational institutions and local investor communities are expected to play an active role in organizing sustainable investment education programs, so that investors are able to make decisions more independently and rationally.

This study has several limitations. First, the use of purposive sampling restricted to cryptocurrency community members may have introduced selection bias, as the sample predominantly male and aged 18–30—overrepresents active, informed investors and limits generalizability to other demographic groups. Second, this study relied on self-reported data collected through a single online questionnaire at one point in time. Therefore, the findings may be susceptible to response bias and common method bias, while the cross-sectional design does not allow the study to establish causal relationships or observe changes in

investor behavior under different cryptocurrency market conditions. Third, although the model demonstrated strong explanatory power with an R-square value of 0.753, approximately 24.7% of the variance in investment decisions remained unexplained. This indicates that other relevant factors, such as financial literacy, risk tolerance, investment experience, market sentiment, and social media exposure, were not captured in the current model. Future studies are therefore encouraged to employ more diverse or probability-based samples, include cryptocurrency investors who are not affiliated with investment communities, conduct research across multiple regions, and use longitudinal or mixed-method designs to obtain a more comprehensive understanding of cryptocurrency investment behavior.

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