

The Influence of FOMO (Fear of Missing Out) and Herding Behavior on Cryptocurrency Investment Decisions Among GIBEI Members in the Ciayumajakuning Region: The Mediating Role of Financial Literacy

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Abstract

This study aims to analyze the influence of Fear of Missing Out (FOMO) and herding behavior on cryptocurrency investment decisions among members of the Indonesia Stock Exchange Investment Gallery (GIBEI) in the Ciayumajakuning region, with financial literacy as a mediating variable. A quantitative associative approach was employed, utilizing survey data collected from GIBEI members and analyzed through Partial Least Squares–Structural Equation Modeling (PLS-SEM). Results from the measurement model confirm that all constructs satisfy validity and reliability criteria. Structural model testing reveals that FOMO exerts a positive and significant effect on cryptocurrency investment decisions, while herding behavior does not directly influence investment decisions in a statistically significant manner. FOMO shows no significant effect on financial literacy, whereas herding behavior positively and significantly influences financial literacy. Financial literacy, however, does not significantly affect cryptocurrency investment decisions, and consequently fails to mediate the influence of either FOMO or herding behavior on investment decisions. These findings underscore that cryptocurrency investment decisions among GIBEI members are predominantly driven by psychological rather than cognitive factors. Accordingly, financial literacy enhancement programs must be complemented by emotional regulation training and awareness of behavioral biases to foster more rational investor decision-making.

Keywords: *Fear of Missing Out (FOMO), Herding Behavior, Financial Literacy, Cryptocurrency Investment Decisions, PLS-SEM*

INTRODUCTION

The rapid advancement of financial technology over the past decade has profoundly transformed investment behavior at both the global and national levels. Among the most disruptive developments is the emergence of cryptocurrency as an alternative asset class offering the potential for extraordinary returns while simultaneously exposing investors to extreme price volatility. In Indonesia, this phenomenon is reflected in a sharp escalation of crypto market participation: data from the Commodity Futures Trading Regulatory Agency (Bappebti) indicate that the number of registered crypto investors surged from 17.25 million in 2023 to more than 20.9 million by August 2024, placing Indonesia among the fastest-growing crypto markets in Asia. The total transaction value reached IDR 650.61 trillion throughout 2024, underscoring the substantial scale of this market. This dramatic growth suggests that investment decision-making — particularly among younger cohorts — is increasingly shaped by psychological, social, and financial literacy dimensions rather than by fundamental analysis alone.

Within this landscape, two behavioral phenomena have received growing scholarly attention: Fear of Missing Out (FOMO) and herding behavior. FOMO denotes an anxiety-driven emotional impulse that compels investors to act quickly for fear of forfeiting profit opportunities, especially when observing sharp price rallies in the crypto market. Almeida (2023) demonstrates that FOMO intensifies when investors witness sudden price spikes, triggering impulsive buying decisions decoupled from analytical rigor. Damayanti et al. (2025), employing a quantitative PLS-SEM framework, further confirm that social media exposure, information overload, and excessive optimism amplify FOMO effects on retail investor decision-making. Herding behavior, on the other hand, refers to the tendency of investors to mimic the decisions of the majority without conducting independent analysis. Grounded in Bikhchandani, Hirshleifer, and Welch's (1992) informational cascade theory, herding emerges when individuals infer superior information from others' actions. In cryptocurrency markets — characterized by high volatility and sentiment-driven price movements — herding has been empirically documented as a temporally significant and market-destabilizing force (Bouri et al., 2019).

Despite the growing body of research on behavioral biases in investment, a critical knowledge gap persists. First, the majority of prior studies examine herding through time-series market data at the global level, rather than from the perspective of investor behavior within localized communities. Second, empirical investigations that simultaneously test the effects of FOMO and herding on cryptocurrency investment decisions remain scarce. Third, the mediating role of financial literacy between these behavioral biases and investment decisions — particularly among GIBEI community members in the Ciayumajakuning region — has not been systematically examined. Financial literacy is theorized to serve as a cognitive safeguard, enabling investors to evaluate risk, assess asset fundamentals, and resist irrational emotional impulses (Zhao & Zhang, 2021). Whether this cognitive capacity effectively attenuates the psychological forces of FOMO and herding in the crypto domain remains an open empirical question.

The Ciayumajakuning region — comprising Cirebon City, Cirebon Regency, Majalengka, Kuningan, and Indramayu — presents a particularly relevant context, as GIBEI communities in this area are dominated by investors aged 18–30, the demographic most susceptible to social media influence and behavioral biases. Understanding the interplay between psychological drivers and cognitive enablers of investment decisions in this population carries significant implications for educators, regulators, and financial platform designers seeking to promote responsible and informed investment practices. Against this backdrop, the present study investigates the direct and mediated effects of FOMO and herding behavior on cryptocurrency investment decisions among GIBEI members in the Ciayumajakuning region, with financial literacy serving as the mediating variable.

LITERATURE REVIEW

Fear of Missing Out (FOMO)

Fear of Missing Out (FOMO) is conceptualized as a non-rational emotional drive that impels investors to repeatedly enter investment positions, even following prior losses, due to the fear of missing future profitable opportunities. Grounded in consumer behavior theory, FOMO constitutes an 'emotional pull' powerful enough to override rational risk assessment (Friederich, 2024). In the context of cryptocurrency, FOMO functions as a primary catalyst for compulsive and impulsive investment behavior among retail investors, significantly distorting the decision-making process (Laraga, 2025). Individuals with low self-control are especially vulnerable to FOMO, as they are more susceptible to emotional impulses and social comparison pressures (Mischel, 2014; Sinaulan, 2025). The phenomenon is further reinforced by social anxiety, heightened media consumption, and the peer-comparison dynamics prevalent on digital platforms — all of which are particularly pronounced among Generation Z investors (Fitri, 2024; Lotulung, 2025).

Herding Behavior

Herding behavior is defined as the tendency of investors to follow the decisions or actions of others without independently analyzing available information. This irrational mimicry is especially prevalent under conditions of information asymmetry or incomplete market data, leading investors to prioritize group consensus over fundamental analysis (Ningtyas, 2020; Daniati & Prasetyo, 2022). Theoretical underpinnings draw from both Informational Cascade Theory (Bikhchandani et al., 1992) and Social

Influence Theory, which posits that social pressure and trust in perceived expertise often outweigh individual analytical judgment. Empirically, herding has been shown to intensify market volatility and systemic investment risk (Devenow & Welch, 1996; Madaan & Singh, 2019), and its manifestations in crypto markets have been confirmed through transaction-level analyses (Gemayel & Preda, 2024).

Financial Literacy

Financial literacy encompasses an individual's ability to understand and apply financial concepts, assess investment risks, and evaluate the characteristics of various financial instruments. Zhao and Zhang (2021), in a Scopus Q1-indexed study, demonstrate that higher financial literacy is positively associated with investment decision quality and serves as a buffer against excessive emotional and social influences. Within the behavioral finance framework, financial literacy is theorized to function as a mediating variable that either amplifies or attenuates the impact of psychological biases — such as FOMO and herding — on investment outcomes. However, empirical evidence on its mediating role in the crypto investment context remains mixed and context-dependent.

Cryptocurrency Investment Decisions

Investment decision-making in behavioral finance deviates substantially from the rational actor model of classical finance theory. Kahneman and Tversky's (1979) Prospect Theory highlights that investors are disproportionately sensitive to potential losses relative to equivalent gains, generating systematic biases in risk assessment and asset selection. In cryptocurrency markets, decision-making is further complicated by extreme price volatility, sentiment-driven narratives, and the rapid dissemination of speculative information through social media. These conditions create fertile ground for behavioral biases — particularly FOMO and herding — to dominate investment choices over fundamental evaluation (Hartono, 2017; Marciano, 2024).

METHODOLOGY

This study employs a quantitative associative research design aimed at examining the causal relationships among FOMO (X1), herding behavior (X2), financial literacy (Z), and cryptocurrency investment decisions (Y) among GIBEI members in the Ciayumajakuning region. Data were collected through a structured questionnaire distributed to GIBEI members using purposive sampling. The analytical method employed is Partial Least Squares–Structural Equation Modeling (PLS-SEM), which is particularly suited for examining complex mediation models with latent constructs in populations characterized by non-normal data distributions (Sugiyono, 2023). The PLS-SEM procedure encompassed outer model assessment (convergent validity, discriminant validity, composite reliability, and Cronbach's alpha) and inner model evaluation (R-square and hypothesis testing via path coefficients and bootstrapping).

RESULTS AND DISCUSSION

Based on the structural model testing using PLS-SEM, the results reveal distinct patterns in how FOMO and herding behavior influence cryptocurrency investment decisions among GIBEI members in Ciayumajakuning, both directly and through the mediating role of financial literacy. The following subsections present the measurement model results, structural model evaluation, and hypothesis testing outcomes.

Measurement Model (Outer Model)

1. Convergent Validity

Table 1 presents the convergent validity results for all constructs. All indicator outer loadings exceed the threshold of 0.70, and the Average Variance Extracted (AVE) values surpass 0.50 for every construct, confirming that each latent variable adequately captures its corresponding indicators. Cronbach's Alpha and Composite Reliability values also exceed 0.70 across all constructs, indicating high internal consistency.

Table 1. Measurement Model – Convergent Validity

Variable	Indicator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
FOMO	X1.1	0.741	0.618	0.856	0.889
	X1.2	0.727			
	X1.3	0.726			
	X1.4	0.825			
	X1.5	0.879			
Herding Behavior	X2.1	0.727	0.644	0.861	0.900
	X2.2	0.840			
	X2.3	0.729			
	X2.4	0.784			
	X2.5	0.918			
Financial Literacy	Z1.1	0.723	0.748	0.911	0.936
	Z1.2	0.718			
	Z1.3	0.949			
	Z1.4	0.953			
	Z1.5	0.945			
Investment Decision	Y1.1	0.815	0.631	0.858	0.895
	Y1.2	0.794			
	Y1.3	0.752			
	Y1.4	0.729			
	Y1.5	0.876			

Based on Table 1, all indicators across FOMO, Herding Behavior, Financial Literacy, and Investment Decision constructs record outer loading values above 0.70, confirming that each indicator is valid in reflecting its respective latent construct. The AVE values for FOMO (0.618), Herding Behavior (0.644), Financial Literacy (0.748), and Investment Decision (0.631) all exceed 0.50, demonstrating that each construct explains more than 50% of the variance in its indicators, thereby satisfying convergent validity criteria. Additionally, all Cronbach's Alpha and Composite Reliability values exceed 0.70, confirming the high internal consistency and reliability of the research instruments.

2. Discriminant Validity

Table 2 presents the discriminant validity results using the Fornell–Larcker criterion. The square root of each construct's AVE (shown on the diagonal) consistently exceeds its correlations with other constructs.

Table 2. Discriminant Validity (Fornell–Larcker Criterion)

Construct	FOMO	Herding Behavior	Investment Decision	Financial Literacy
FOMO	0.786			
Herding Behavior	0.459	0.803		
Investment Decision	0.499	0.557	0.795	
Financial Literacy				0.876

Construct	FOMO	Herding Behavior	Investment Decision	Financial Literacy
Financial Literacy	0.392	0.690	0.580	0.865

The results confirm that all variables in this study are empirically distinct and that no cross-construct measurement overlap occurs, thus satisfying discriminant validity requirements.

3. Reliability Test

Table 3. Construct Reliability

Variable	Cronbach's Alpha	Composite Reliability
FOMO	0.856	0.889
Herding Behavior	0.861	0.900
Investment Decision	0.858	0.895
Financial Literacy	0.911	0.924

All constructs demonstrate Cronbach's Alpha and Composite Reliability values above 0.70 (Table 3), indicating high internal consistency. All variables are therefore declared reliable and suitable for structural model analysis.

Structural Model Evaluation (Inner Model)

4. Coefficient of Determination (R-Square)

Table 4. Coefficient of Determination (R-Square)

Variable	R-Square	R-Square Adjusted
Investment Decision (Y)	0.443	0.425
Financial Literacy (Z)	0.483	0.472

The R-square for Investment Decision (0.443) indicates that FOMO, herding behavior, and financial literacy collectively explain 44.3% of the variance in cryptocurrency investment decisions. The R-square for Financial Literacy (0.483) indicates that FOMO and herding behavior account for 48.3% of the variance in financial literacy. Both values fall within the moderate explanatory range, indicating reasonable model fit while acknowledging that additional variables may further explain outcome variance.

5. Hypothesis Testing

Table 5. Hypothesis Testing — Path Coefficients

Hypothesis Path	Path Coefficient	T-Statistics	P-Values	Decision
FOMO → Investment Decision	0.276	2.166	0.030	Supported
FOMO → Financial Literacy	0.095	0.696	0.487	Not Supported
Herding → Investment Decision	0.201	1.401	0.161	Not Supported
Herding → Financial Literacy	0.646	5.107	0.000	Supported
Financial Literacy → Inv. Decision	0.333	1.655	0.098	Not Supported

DISCUSSION

The structural model results yield several substantively important findings. First, FOMO exerts a positive and statistically significant direct effect on cryptocurrency investment decisions ($\beta = 0.276$, p

= 0.030), supporting the hypothesis that emotional anxiety around missed profit opportunities drives impulsive and accelerated investment action in the volatile crypto market. This result is consistent with behavioral finance theory, which posits that emotional biases often supersede rational deliberation in asset selection (Kahneman & Tversky, 1979), and aligns with prior empirical findings confirming FOMO as a primary determinant of speculative behavior among retail crypto investors (Damayanti et al., 2025; Laraga, 2025).

Second, FOMO does not exert a significant effect on financial literacy ($\beta = 0.095$, $p = 0.487$). This finding suggests that the emotional urgency induced by FOMO does not translate into enhanced financial knowledge acquisition. Investors experiencing FOMO tend to act on emotional impulse rather than engaging in reflective learning about risk profiles or instrument characteristics. This asymmetry between emotional reactivity and cognitive development underscores the importance of distinguishing psychological from cognitive pathways in investor behavior research.

Third, herding behavior does not significantly and directly affect cryptocurrency investment decisions ($\beta = 0.201$, $p = 0.161$). This result may reflect the particular character of GIBEI communities, which are structured around education, peer learning, and guided investment practice. Within such communities, the tendency to follow others' investment behavior may be channeled through knowledge-building rather than blind imitation, thereby attenuating the direct conversion of herding impulses into investment decisions.

Fourth, herding behavior positively and significantly influences financial literacy ($\beta = 0.646$, $p = 0.000$). This is among the most compelling findings of the study, implying that social interaction, group discussion, and information sharing inherent in GIBEI community dynamics function as effective channels of financial knowledge transfer. Herding, when embedded in a learning-oriented environment, may operate as a constructive social learning mechanism rather than a purely destabilizing force — a nuanced finding that challenges the uniformly negative characterization of herding in the finance literature (Devenow & Welch, 1996).

Fifth, financial literacy does not significantly affect cryptocurrency investment decisions ($\beta = 0.333$, $p = 0.098$). This counterintuitive result suggests that even investors with adequate financial knowledge remain susceptible to the sentiment-driven dynamics of the crypto market. Consequently, financial literacy does not emerge as a significant mediator in either the FOMO–investment decision or herding–investment decision pathways. Collectively, these findings confirm that cryptocurrency investment decisions are predominantly driven by psychological biases rather than cognitive capacities, reinforcing the call for multi-dimensional investor education frameworks that integrate financial knowledge with emotional regulation and behavioral awareness training.

CONCLUSION

This study examined the influence of FOMO, herding behavior, and financial literacy on cryptocurrency investment decisions among GIBEI members in the Ciayumajakuning region using PLS-SEM. The analysis yields five principal conclusions. First, FOMO positively and significantly influences cryptocurrency investment decisions, confirming that emotional fear of missed opportunities is a primary driver of crypto investment behavior. Second, herding behavior does not directly and significantly affect investment decisions. Third, FOMO does not significantly influence financial literacy, indicating that emotional urgency does not promote cognitive learning. Fourth, herding behavior positively and significantly influences financial literacy, suggesting that social dynamics within GIBEI communities facilitate knowledge transfer. Fifth, financial literacy does not significantly mediate either the FOMO–investment decision or herding–investment decision relationships, indicating that psychological factors dominate over cognitive factors in this setting.

These findings provide practical implications for policymakers, educational institutions, and investor communities. Programs aimed at improving investor behavior in the cryptocurrency market should integrate emotional intelligence training, bias awareness, and risk management education alongside conventional financial literacy curricula. Future research should incorporate additional psychological variables — such as overconfidence, loss aversion, and risk tolerance — and extend the geographic scope of sampling to enhance the external validity of the findings.

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