

FAKTOR-FAKTOR YANG MEMPENGARUHI INTENTION TO INVEST CRYPTOCURRENCY TERHADAP GEN Z DI INDONESIA

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi niat Generasi Z di Indonesia untuk berinvestasi di Cryptocurrency. Seperti Overconfidence Bias, Anchoring Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion. Target sampling adalah Gen Z yang berniat berinvestasi di Cryptocurrency. Metode Snowball Sampling digunakan untuk menyebarkan kuesioner kepada mereka yang pernah menggunakan Cryptocurrency. untuk mendapatkan bukti empiris dari sampel 220 responden yang disurvei dan dianalisis dengan menggunakan metode PLS-SEM. Hasil penelitian menunjukkan bahwa variable seperti Overconfidence Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion berpengaruh signifikan positif dan Anchoring Bias Berpengaruh signifikan negatif terhadap Intention to invest Cryptocurrency. Selain itu penelitian ini juga meneliti faktor yang mempengaruhi niat Gen Z di Indonesia dalam mengalokasikan keuangannya dalam Cryptocurrency yang merupakan hal yang baru karena konsep ini jarang digunakan pada penelitian sejenis.

Kata Kunci: Overconfidence Bias, Anchoring Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion.

ABSTRACT

This study aims to determine the factors that influence the intention of Generation Z in Indonesia to invest in Cryptocurrency. Such as Overconfidence Bias, Anchoring Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion. The sampling target is Gen Z who intends to invest in Cryptocurrency. Snowball sampling method is used to distribute questionnaires to those who have used Cryptocurrency. to obtain empirical evidence from a sample of 220 respondents who were surveyed and analyzed using the PLS-SEM method. The results showed that variables such as Overconfidence Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion had a positive significant effect and Anchoring Bias had a negative significant effect on Intention to invest Cryptocurrency. In addition, this study also examines the factors that influence Gen Z's intention in Indonesia in allocating their finances in Cryptocurrency which is new because this concept is rarely used in similar studies.

Keywords: Overconfidence Bias, Anchoring Bias, Herding Bias, Fear and Greed, Regret Aversion, Loss Aversion.

INTRODUCTION

As time progresses, technological advancements continue to accelerate across various aspects of life, including the financial sector particularly investments. This has led to the emergence of new transaction methods and investment instruments such as cryptocurrency. "Cryptocurrency" has become one of the most sought-after and discussed terms among speculative investors and has generated more myths than anyone could imagine. Currently, cryptocurrencies have become a very popular investment subject worldwide. Although there are tighter regulations concerning cryptocurrencies, some investors remain obsessed with investing in them (Gong et al., 2023). Driven by rapid digital transformation, Indonesia has seen a significant increase in cryptocurrency adoption. Data indicates that Indonesian crypto users are growing at a faster rate than in other Southeast Asian countries, especially among the younger, tech-savvy generation. A report by Chainalysis (2022) ranked Indonesia among the top twenty countries worldwide in terms of cryptocurrency adoption, with a notable increase in recent years. As of February 2023, there were 17 million registered

cryptocurrency users, up from 16 million the previous year (Rais, 2023). However, both the public and Generation Z in Indonesia still lack sufficient understanding of digital finance, often resulting in emotionally-driven or inaccurate investment decisions (Haryanto et al., 2023).

Generation Z refers to those born between 1995 and the early 2010s (Pandurugan & Al Shammakhi, 2024). This generation has grown up surrounded by rapidly developing technology, which allows them to easily access the latest information. With innovations in digital investment platforms, many Gen Z individuals have shown interest in the financial world particularly investments. Cryptocurrency has become especially appealing to Gen Z due to its unconventional nature, making it more challenging and risky compared to conventional investment tools used by previous generations. Because of its high-risk and high-reward characteristics, cryptocurrency is attractive to Gen Z investors. However, studies show that many Indonesian crypto investors tend to make decisions based on behavioral biases such as Overconfidence Bias, Herding Bias, and Subjective Norms, especially in volatile markets. This condition is further influenced by social pressure to be recognized by specific groups even during bear markets (Tjondro et al., 2023).

Even though cryptocurrency is booming due to its potentially high returns, it's important to understand that investing in crypto is fundamentally different from traditional investments. Transactions are not bound by time they can happen 24/7 and it is also a relatively new technological competitor. Therefore, crypto markets are more volatile compared to traditional stock markets and can lead to substantial losses (Mosbey et al., 2024). Moreover, the unclear regulatory landscape in Indonesia contributes to uncertainty in Gen Z's intention to allocate their finances toward digital assets. As a result, many Gen Z individuals remain hesitant to enter the world of cryptocurrency due to a lack of clear investment intentions. This highlights the need for a deeper understanding of the psychological and behavioral factors influencing Gen Z's investment intentions in cryptocurrency, particularly within the Indonesian context.

Previous studies have explored investor decision-making factors in Indonesia's cryptocurrency market (Syarkani & Tristanto, 2022). However, this study focuses on the intention of Gen Z to invest in crypto, which remains under-researched. Gen Z is considered more tech literate than previous generations (Thangavel et al., 2021). They are driven by technological convenience and hedonic motivations such as thrill and entertainment during the investment process. Perceptions of value and ease of access also boost their interest in investing in this sector (Ali & Joshi, 2022). Nevertheless, their intention to invest in cryptocurrency is still limited. Most existing studies focus on experienced investors without accounting for the unique characteristics of Gen Z, who often associate their decisions with biases such as Overconfidence, Anchoring, Herding, Fear and Greed, Regret Aversion, and Loss Aversion.

This research aims to contribute to theory, academia, policymakers, and the broader understanding of Gen Z's investment behavior particularly their financial allocation in cryptocurrency. By understanding the primary factors that influence Gen Z's actions, the findings of this study can help governments and community leaders attract young investors and further develop the cryptocurrency market. Additionally, this study provides insights for future research on investment decisions and may serve as a valuable reference for studies related to investment behavior.

RESEARCH METHOD

This study adopts a quantitative approach, analyzing the psychological and behavioral factors that influence Generation Z's intention to invest in cryptocurrency. The data were collected using a survey distributed through Google Forms. This primary data collection

method aimed to measure the behavioral factors affecting Gen Z's interest and intention to invest in cryptocurrency in Indonesia. The survey consisted of questions designed to assess respondents' understanding of cryptocurrency and their exposure to behavioral biases, including Overconfidence Bias, Anchoring Bias, Herding Bias, Fear and Greed, Regret Aversion, and Loss Aversion. These factors were identified as potential influencers of Gen Z's investment intentions.

The target population for this study was Gen Z individuals who are actively planning or intending to invest in cryptocurrency. A snowball sampling method was used to reach respondents who have experience using cryptocurrency. This approach helped distribute the survey to individuals within crypto-related communities or networks. To estimate the parameters of the study, the Structural Equation Modeling (SEM) method was applied using Partial Least Squares (PLS). The SmartPLS software was utilized for data analysis. PLS-SEM was selected due to its suitability for complex research frameworks involving both measurement models (outer models) and structural models (inner models). PLS-SEM is also recommended when the study includes mediating variables or non-normal data distributions. According to Hair et al. (2014), a sample size of 10 respondents per indicator is considered sufficient for PLS-SEM. With 22 indicators in this study, a minimum sample size of 220 was determined to be appropriate.

VARIABLE	DEFINITION	REFERENCE
Over Confidence Bias	<ol style="list-style-type: none"> 1. I trust my own investment judgment more than others. 2. I make investment decisions without relying on others. 3. I believe my knowledge and experience will help me gain profits in the crypto market. 4. I am confident that I can succeed where others fail. 	(Hossain & Siddiqua, 2022)
Anchoring Bias	<ol style="list-style-type: none"> 1. I rely on my past experiences in the market to make current investment decisions. 2. I forecast future price movements based on current crypto prices. 3. High returns in the crypto market are my main reason for investing. 4. I believe excessive trading leads to high market returns. 	(Shahzad et al., 2024)
Herding Bias	<ol style="list-style-type: none"> 1. I often follow other investors' decisions when considering crypto investments. 2. When I see others buying or selling, I tend to do the same. 3. I quickly revise my decisions based on other investors' actions. 4. I change my decisions based on other investors' returns. 	(Mahadevi Aulia & Asandimitra, 2021)
Fear and Greed	<ol style="list-style-type: none"> 1. I worry that fear and greed affect my freedom in buying crypto. 2. Fear and anxiety from past losses have changed my buying habits. 	(Satish et al., 2021)
Regret Aversion	<ol style="list-style-type: none"> 1. I fear the potential losses from new investments. 2. I feel doubtful when making investment decisions. 3. Past bad investment experiences make me hesitant or regretful. 	(Gradinda Maryama Mayora & Wiwik Lestari, 2024)
Loss Aversion	<ol style="list-style-type: none"> 1. I feel that crypto markets are overvalued and likely to experience corrections. 2. Even though crypto is promising, I am aware it can also decline sharply. 	(Saivasan & Lokhande, 2022)
Intention To Invest Cryptocurrency	<ol style="list-style-type: none"> 1. I tend to buy or invest in crypto. 2. I want to invest in crypto. 3. I plan to invest in crypto in the near future. 	(Ng et al., 2025)

RESULTS AND DISCUSSION

Table 1. Demographic Test Results

Characteristics	Type	Total	Percentage
Have you ever invested in cryptocurrency?	No	0	0%
	Yes	220	100%
Gender	Male	118	53,6%
	Female	102	46,4%
How long have you been investing in cryptocurrency?	< 1 Year	71	32,3%
	> 1 Year	55	25%
	1 Year	94	42,7%

Source: Processed Primary Data (2025).

The primary data collected in 2025 shows that all respondents in this study (100%) have had experience investing in cryptocurrency. This indicates that the participants have relevant and firsthand exposure to the crypto investment landscape, which aligns well with the study's objectives. In terms of gender distribution, the majority of respondents are male (53.6%), followed by females (46.4%). This fairly balanced distribution indicates that both genders show interest in crypto investment, though males slightly dominate. Regarding investment duration, the largest group of respondents (42.7%) has been investing for one year, followed by those with less than one year of experience (32.3%), and those with more than one year (25%). These results indicate that most participants are relatively new but actively involved investors providing a strong foundation for analyzing Gen Z investment behavior in cryptocurrency.

Table 2. Outer Model Test

Construct	Item	Convergent Validity (Outer Loading)	VIF	Discriminant Validity (AVE)	Composite Reliability	Cronbach Alpha	R Square
Anchoring Bias	AB1	0,892	2,631				
	AB2	0,881	2,299	0,732	0,914	0,884	
	AB3	0,853	2,473				
Fear and Greed	AB4	0,791	2,483				
	FNG1	0,951	3,117	0,912	0,908	0,904	
Herding Bias	FNG2	0,959	3,117				
	HB1	0,868	2,886				
	HB2	0,883	2,993	0,707	0,874	0,862	
	HB3	0,784	1,939				
Intention to Invest Cryptocurrencies	HB4	0,825	2,014				
	ITIC1	0,900	2,588				
	ITIC2	0,888	2,425	0,775	0,854	0,854	0,622
Loss Aversion	ITIC3	0,851	1,780				
	LA1	0,913	1,566	0,799	0,766	0,751	
Overconfidence Bias	LA2	0,875	1,566				
	OB1	0,806	2,342				
	OB2	0,810	2,371	0,642	0,818	0,815	
	OB3	0,812	1,729				
Regret Aversion	OB4	0,776	1,562				
	RA1	0,924	4,513	0,815	0,885	0,885	

RA2	0,936	4,893
RA3	0,845	1,788

Source: Processed Primary Data (2025).

The outer model was evaluated to assess the validity and reliability of the constructs used in the study. Convergent validity was assessed through outer loading values, where a value above 0.70 indicates that indicators adequately represent their constructs (Hair et al., 2020). All items showed outer loading values above 0.70, confirming strong convergent validity. Discriminant validity was examined using AVE (Average Variance Extracted), with all constructs meeting the minimum requirement of $AVE > 0.50$. The VIF (Variance Inflation Factor) values were also below 5, indicating no multicollinearity issues between indicators (Kock, 2020). Composite reliability and Cronbach's Alpha were used to assess internal consistency. All constructs exceeded the threshold of 0.70, suggesting that the measurements are reliable (Sekaran & Bougie, 2020). An R-Square (R^2) value of 0.622 for the “Intention to Invest in Cryptocurrency” variable indicates that 62.2% of the variance can be explained by the behavioral bias constructs used. This value suggests a moderate to strong predictive model.

Table 3. HTMT Test

	<i>Fear and Greed</i>	<i>Herding Bias</i>	<i>Intention to Invest Cryptocurrencies</i>	<i>Loss Aversion</i>	<i>Overconfidence Bias</i>	<i>Regret Aversion</i>
<i>Anchoring Bias</i>						
<i>Fear and Greed</i>	0,086					
<i>Herding Bias</i>	0,716	0,441				
<i>Intention to Invest Cryptocurrencies</i>	0,077	0,625	0,631			
<i>Loss Aversion</i>	0,586	0,417	0,820	0,657		
<i>Overconfidence Bias</i>	0,244	0,598	0,599	0,757	0,544	
<i>Regret Aversion</i>	0,627	0,402	0,869	0,614	0,886	0,548

Source: Processed Primary Data (2025).

The Heterotrait-Monotrait (HTMT) ratio was used to evaluate discriminant validity between constructs. Most HTMT values were below the ideal threshold of 0.85 (and within the acceptable tolerance limit of 0.90). For example, the HTMT between Anchoring Bias and Fear and Greed was 0.086, and between Fear and Greed and Overconfidence Bias was 0.598. However, some values approached or slightly exceeded 0.85, such as the HTMT between Loss Aversion and Regret Aversion (0.886) and between Herding Bias and Regret Aversion (0.869). While still acceptable under the 0.90 tolerance rule, these values indicate a need for careful instrument refinement in future studies.

Table 4. Fornell-Larcker Test

	<i>Fear and Greed</i>	<i>Herding Bias</i>	<i>Intention to Invest Cryptocurrencies</i>	<i>Loss Aversion</i>	<i>Overconfidence Bias</i>	<i>Regret Aversion</i>
<i>Anchoring Bias</i>	0,855					

<i>Fear and Greed</i>	0,077	0,955				
<i>Herding Bias</i>	0,630	0,395	0,841			
<i>Intention to Invest</i>						
<i>Cryptocurrencies</i>	0,074	0,551	0,548	0,880		
<i>Loss Aversion</i>	0,477	0,339	0,664	0,528	0,894	
<i>Overconfidence Bias</i>	0,213	0,518	0,524	0,641	0,446	0,801
<i>Regret Aversion</i>	0,556	0,361	0,751	0,535	0,727	0,489
						0,903

Source: Processed Primary Data (2025).

The Fornell-Larcker criterion was also applied to evaluate discriminant validity. The square root of AVE for each construct was higher than its correlation with other constructs. For example, the square root of AVE for Anchoring Bias is 0.855, which is greater than its correlation with Herding Bias (0.630) and Regret Aversion (0.556). Similarly, Fear and Greed has a square root of AVE of 0.955, higher than its correlation with Overconfidence Bias (0.518). These results confirm adequate discriminant validity for all constructs used in this research model.

Tabel 5. Inner Model Test

X-Y	t-statistic	p-value	Conclusion	Hypothesis
<i>Overconfidence Bias -> Intention to Invest Cryptocurrencies</i>	5,542	0,000	Significant Positive	H1 Accepted
<i>Anchoring Bias -> Intention to Invest Cryptocurrencies</i>	4,235	0,000	Significant Negative	H2 Rejected
<i>Herding Bias -> Intention to Invest Cryptocurrencies</i>	3,249	0,001	Significant Positive	H3 Accepted
<i>Fear and Greed -> Intention to Invest Cryptocurrencies</i>	2,677	0,008	Significant Positive	H4 Accepted
<i>Regret Aversion -> Intention to Invest Cryptocurrencies</i>	2,308	0,021	Significant Positive	H5 Accepted
<i>Loss Aversion -> Intention to Invest Cryptocurrencies</i>	2,163	0,031	Significant Positive	H6 Accepted

Source: Processed Primary Data (2025).

Effect of Overconfidence Bias on Investment Intention

This hypothesis indicates that Overconfidence Bias has a significant positive effect on the intention to invest in cryptocurrency. Therefore, H1 is accepted. This result aligns with Brini and Lenz (2024) and Jain et al. (2020), who stated that overconfidence leads investors to take excessive risks in the financial market, including cryptocurrencies, which in turn increases their desire to invest in digital assets. Evelyn & Marheni (2023) also stated that individuals with strong confidence literacy tend to make more assertive investment decisions, believing in their superior abilities.

Effect of Anchoring Bias on Investment Intention

This hypothesis indicates a significant negative effect of Anchoring Bias on investment intention, meaning H2 is rejected. This finding contrasts with Robin and Angelina (2020), Saivasan and Lokhande (2022), and Mamidala et al. (2024), who found a significant positive effect. Anchoring Bias usually influences investment intentions when investors use previous experiences as a frame of reference in uncertain conditions. However, in this study, excessive reliance on past information might have made Gen Z more hesitant due to crypto market volatility.

Effect of Herding Bias on Investment Intention

This hypothesis is supported, with a significant positive effect, meaning H3 is accepted. This supports findings by Blasco et al. (2022) and Gupta & Shrivastava (2022), who found that herding behavior strongly affects investment decisions. Investors tend to follow others, especially during pre-event periods, such as market volatility or expiration weeks. Herding often stems from information overload or the influence of dominant strategies in the market.

Effect of Fear and Greed on Investment Intention

The hypothesis is accepted, showing a significant positive effect. This aligns with Wang et al. (2024), Gaies et al. (2023), Cavalheiro et al. (2024), and Gerrans et al. (2023), who all emphasized that fear and greed sentiments significantly influence decision-making in volatile markets. These emotional drivers often reflect investor reactions to high-risk opportunities, either by chasing gains or trying to avoid missing out.

Effect of Regret Aversion on Investment Intention

This hypothesis is accepted, indicating a significant positive effect. According to Duong et al. (2024), Sebastião & Godinho (2021), and Radanliev (2024), fear of making regrettable decisions can lead to more cautious or speculative behavior. Regret aversion influences how investors approach decision-making under uncertainty, especially in unregulated crypto markets.

Effect of Loss Aversion on Investment Intention

The last hypothesis is also accepted, with a significant positive effect. This is consistent with findings by S. Kumar & Chaurasia (2024), Hossain & Siddiqua (2022), and J. Kumar et al. (2024), who explained that people are more emotionally impacted by potential losses than equivalent gains. This causes them to act more conservatively, plan better, and create diversified portfolios to reduce risk.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The results of this study show that psychological factors such as Overconfidence Bias, Herding Bias, Fear and Greed, Regret Aversion, and Loss Aversion have a significant positive influence on Generation Z's intention to invest in cryptocurrency in Indonesia. Meanwhile, Anchoring Bias was found to have a significant negative influence. These findings suggest that Gen Z's investment decisions are not solely based on rational considerations but are also affected by emotional and cognitive biases, especially when navigating the highly volatile and uncertain nature of cryptocurrency markets. However, this research has certain limitations. First, the distribution of the questionnaire was not evenly spread across all regions in Indonesia, which may affect the generalizability of the findings. Second, this study focused only on Generation Z, excluding Millennials and Generation X, whose perspectives could offer additional insights. Lastly, some of the respondents were under 18 years old and did not yet possess an official ID, which limits their access to cryptocurrency platforms and reflects limited knowledge about digital investment.

Recommendations

This study provides several suggestions for future research. It is recommended that future studies broaden the scope of the sample to include other generations such as Millennials, Generation Alpha, and Generation X to strengthen the research findings. Additionally, it would be valuable to incorporate non-psychological variables such as economic factors, financial literacy, the influence of social media, and government regulations to provide a more comprehensive understanding of what shapes cryptocurrency investment intentions. Moreover, qualitative methods such as interviews could be employed to gain deeper insights into the emotional and behavioral reasons behind individuals'

decisions to invest in high-risk digital assets like cryptocurrency. This approach may help uncover nuances that quantitative methods alone cannot capture.

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