

## Navigating the Mind of Gen Z Investors: Behavioral Factors and Stock Decision-Making in Vietnam

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### Abstract

This study employed Structural Equation Modeling (SEM) to investigate how behavioral factors impact the stock investment decisions of Generation Z in Vietnam. Analysis of 558 valid survey responses revealed that overconfidence, fear of missing out (FOMO), representativeness bias, and risk attitude significantly and positively influenced investment behavior. In contrast, framing effects and herding behavior did not show a significant relationship with investment decisions. Notably, FOMO—commonly examined in consumer behavior, shopping, and entertainment contexts—has been underexplored in investment-related research, positioning it as a novel contribution of this study.

Based on the findings, the authors offer recommendations to encourage more informed and stable investment practices among Vietnamese Gen Z investors. These include managing high-frequency and high-risk trading, maintaining emotional discipline, and adhering to strategic, analytical approaches to investing. Investors are advised to avoid reactive, psychologically-driven decisions. Additionally, it is recommended that personal finance and investment literacy be integrated into both general and higher education curricula. The study also emphasizes the need for oversight of misinformation in media and suggests that regulatory measures be enforced to hold securities firms accountable for any manipulation of investment-related information.

**Keywords:** Fear of missing out, Overconfidence, Representativeness bias, Risk attitude, Generation Z

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### Introduction

In recent years, the Vietnamese stock market—as well as markets globally—has witnessed an increasing level of participation from Generation Z, defined as individuals born between 1995 and 2010 [1]. This generation adopts a distinct lifestyle and investment behavior, differing markedly from earlier generations. These differences are largely driven by their fluency in technology, which enables them to access extensive information and financial tools via smartphones and the internet [2].

Within the field of behavioral finance, both domestic and international studies have primarily centered on understanding how psychological and behavioral factors influence individual investors' decisions. These factors are generally grouped into four main categories: self-deception, heuristic-driven biases, emotional influences, and social interaction [3]. However, limited research has specifically focused on Generation Z—a new segment of investors who often depend on family support and may not yet be financially independent. This gap highlights the need for a focused investigation into how behavioral factors affect stock investment decisions among Vietnamese Generation Z investors.

Previous research conducted in various countries confirms that psychological traits play a pivotal role in shaping investor behavior. For example, Bogunjoko (2021) analyzed the Nigerian market, Ton (2019) focused on Vietnam, Abul (2019)



explored Kuwait, Cucinelli *et al.* (2016) examined Italy, and Sajeev *et al.* (2021) looked into the Indian market [4–8]. Despite this growing body of literature, little is known about how these factors influence Generation Z, an emerging group of investors with unique characteristics and needs.

This study aims to fill that gap by investigating how behavioral factors—such as overconfidence, fear of missing out (FOMO), representativeness, and risk attitude—affect the investment decisions of Generation Z in Vietnam. A key feature of this research is its exploration of FOMO, a concept commonly examined in consumer behavior and entertainment but rarely addressed in investment contexts. By doing so, this study provides both theoretical insight and practical implications for understanding stock market behavior among young investors and contributes a novel perspective to the broader field of behavioral finance.

## Materials and Methods

### *Investment decisions*

Investment, at its core, involves allocating current resources with the expectation of achieving future financial returns [9]. Making an investment decision means choosing from multiple alternatives after analyzing factors such as market dynamics, potential risks, and expected profits [10]. In the context of stock markets, this decision involves committing funds to securities—buying or selling shares—based on personal goals and risk preferences to gain desirable outcomes.

Rather than simply asking whether someone has made an investment, studies focusing on the stock market typically target individuals with prior investing experience to collect more accurate data [5, 8]. This is because investing requires a certain level of knowledge and familiarity. According to Putri and Hamidi (2019), investment decisions can be assessed through indicators like perceived risk, expected return, and the duration of the investment [11]. In this research, the concept of investment decision-making reflects how confident and satisfied Generation Z investors feel about their trading choices in the stock market.

The factors shaping such decisions are studied through two main lenses: traditional finance and behavioral finance. Traditional finance assumes that investors are rational and always aim to maximize profit. However, scholars like Thaler (2005) and Bakar & Yi (2016) have shown that this is not always the case [12, 13]. Investors are often influenced by psychological biases and emotional reactions, which are the main focus of behavioral finance research.

### *Behavioral factors affecting investment decisions*

#### *Herding behavior*

Herding occurs when individuals imitate the behavior of others instead of acting independently. In the investment world, this manifests as following market trends or copying the actions of other investors rather than conducting personal analysis [14, 15].

Scholars such as Abul (2019), Bogunjoko (2021), and Scharfstein & Stein (1990) argue that this behavior often emerges from the lack of clear market information [4, 6, 16]. By observing others, investors reduce the time and cost needed to assess the market themselves. Additional studies by Chiang & Zheng (2010), Ton (2019), and Gupta & Kohli (2021) confirm that herd behavior is a widespread phenomenon that can significantly influence market trends [5, 17, 18].

Cilliers (2017) notes that Generation Z, being digital natives, tend to engage in frequent peer-to-peer interactions through online platforms, which can amplify herd behavior [19]. Their preference for group consensus and online communities might make them more likely to follow others when investing.

From this foundation, the study proposes the following hypothesis:

**H1: Herding behavior positively influences the investment decisions of Generation Z in Vietnam.**

#### *Overconfidence*

Overconfidence, as discussed by Odean (1998), Ton and Dao (2014), Shiller (2015), and Jha (2016), refers to an investor's exaggerated belief in their own abilities, such as intuition, skill, or experience, to outperform the market [20–23]. This mindset persists even in the absence of supporting evidence. While having confidence can be beneficial in decision-making, excessive confidence can be detrimental. It may result in frequent trading, the neglect of contradictory information, underestimation of risk, and the fueling of market bubbles [4, 12, 24].

Previous studies by Ton and Dao (2014), Riaz and Iqbal (2015), and Bakar and Yi (2016) indicate a positive link between investor overconfidence and stock market participation [13, 21, 25]. However, contrasting evidence from Abul's (2019) research on Kuwaiti investors found no significant influence of overconfidence on investment behavior [6].

Members of Generation Z often exhibit strong self-assurance and make decisions quickly, which may make them more prone to overconfidence in financial matters. In line with earlier findings, this study proposes the following hypothesis:

**H2: Overconfidence positively influences securities investment decisions among Generation Z in Vietnam.**

### *Fear of missing out (FOMO)*

The term "Fear of Missing Out" (FOMO) describes the anxiety individuals feel when they perceive others are experiencing more rewarding activities or opportunities [26]. In financial contexts, FOMO can drive investors to buy into assets hastily—especially during a price surge—motivated by the fear of being left behind. This often occurs without proper analysis or risk assessment.

FOMO is rooted in the psychological need to remain socially connected and updated on others' activities. With the rise of social media, real-time access to peers' investment actions and financial trends has amplified this effect [26]. Generation Z, being digital natives, are especially susceptible due to their constant online engagement and social awareness.

Thus, the following hypothesis is proposed:

**H3: Fear of Missing Out positively influences stock investment decisions among Generation Z in Vietnam.**

### *Framing*

Framing theory, introduced by Kahneman and Tversky (1979), explains how the way information is presented can influence decision-making [27]. Investors may make different choices depending on whether the information is framed positively or negatively—even when the core content remains unchanged.

Studies by Ritter (2003), Diacon and Hasseldine (2007), and Wahla *et al.* (2019) suggest that investors tend to favor visually presented data over textual descriptions and are more receptive to information that aligns with their prior beliefs [28–30]. Additionally, positively framed information tends to be perceived more favorably than negatively framed messages.

Further research by Wahla *et al.* (2019), Csobanka (2016), and Gonzalez *et al.* (2005) reinforces the idea that framing can sway investment decisions [30–32]. Therefore, this study aims to evaluate its effect on Generation Z investors by testing the following hypothesis:

**H4: Framing has a positive impact on Generation Z's securities investment decisions in Vietnam.**

### *Representativeness*

Representativeness bias occurs when individuals make judgments based on how much a current situation resembles a known pattern or stereotype, often relying on recent events while neglecting historical data [23]. This mental shortcut can lead investors to overestimate the likelihood of certain outcomes based on surface similarities.

For instance, Lakonishok *et al.* (1992) observed that investors tend to favor smaller, high-growth companies that have recently performed well, believing their success will continue [33]. In contrast, Lauricella (2019), after analyzing investment trends from 1999 to 2019, found that many investors leaned toward larger, more stable firms, suggesting a bias toward perceived safety and reliability [34]. These contradictory preferences illustrate how representativeness can misguide investors—either by overvaluing recent positive feedback or by sticking with conventional choices without proper evaluation.

In the Vietnamese market, Ton (2019) noted that such biases are common among retail investors, who frequently base their decisions on pattern recognition rather than in-depth analysis [5]. Reflecting on this behavior, we propose the following hypothesis:

**H5: Representativeness positively influences securities investment decisions among Generation Z in Vietnam.**

### *Risk attitude*

Risk attitude describes an individual's inclination to engage in activities that involve uncertainty in pursuit of potential gain [35, 36]. People who exhibit a higher risk tolerance are generally more open to investing in volatile or high-reward financial instruments rather than playing it safe with guaranteed returns.

Research from Weber *et al.* (1998), Antoniou *et al.* (1997), and Abul (2019) indicates that individuals with a higher willingness to take risks are more likely to participate in financial markets and make investment decisions [6, 37, 38].

Age has also been shown to influence risk-taking behavior. Studies by Sajeev *et al.* (2021) and Wang (2001) highlight that younger generations—particularly Generation Z—are more risk-tolerant than their older counterparts [8, 39]. This view is supported by Wijaya and Afgani (2021), who found that risk appetite significantly impacts investment decisions among Gen Z in Bandung, Indonesia [1].

In light of this evidence, this study suggests the following:

**H6: Risk attitude positively influences Generation Z's decision to invest in securities in Vietnam.**

### *Research model*

The conceptual framework of this study is grounded in behavioral finance theory and identifies six psychological factors that may influence stock investment decisions among Generation Z in Vietnam. These include herd behavior, overconfidence, fear of missing out (FOMO), framing effects, representativeness bias, and risk attitude. The model proposes that each of these behavioral factors exerts a positive influence on investment decision-making within this demographic. **Figure 1** illustrates the proposed research model.

## Research methodology

### Qualitative research

To ensure the contextual appropriateness and relevance of the selected behavioral factors, qualitative research was conducted as a preliminary step. In-depth interviews were carried out with 30 Generation Z investors during April and May 2022. These interviews lasted between 15 and 35 minutes and were conducted either face-to-face in casual settings such as coffee shops or remotely via phone.

The interview participants were sourced from eight securities companies in Vietnam. Specifically, two respondents were introduced through SSI Securities Corporation, three through Mirae Asset Securities, three through Vietcombank Securities, five through VNDirect Securities, four through MB Securities, four through VPS Securities, four through Viet Securities Joint Stock Company, and five through AIS Securities. The insights obtained from these interviews were used to refine and validate the research instrument prior to the broader quantitative phase.

### Quantitative research

The quantitative stage of the study was conducted between April and September 2022, targeting Generation Z investors in Vietnam's stock market. The survey consisted of two sections. The first section collected general demographic and background information about the respondents. The second section included 26 items designed to measure behavioral variables using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree."

The survey was administered using Google Forms and distributed via securities firms and educational institutions. The scale items were derived from established research in behavioral finance, adjusted in accordance with findings from the qualitative phase, and tailored to the specific objectives and scope of this study. Details of the measurement scales are presented in **Table 1**.

**Table 1.** Origin of the scale of variables

No	Variable Name	Code	Number of observations	Source
1	Herding behavior	HB	5	Chiang and Zheng (2010), Abul (2019), results of in-depth interviews [6, 17].
2	Overconfidence	OCF	4	Abul (2019), Bogunjoko (2021), results of in-depth interviews [4, 6].
3	Fear of missing out.	FOMO	4	Przybylski <i>et al.</i> (2013), Bogunjoko (77634), results of in-depth interview [4, 26].
4	Framing	FRA	4	Csobanka (2016), results of in-depth interviews [31].
5	Representativeness	REP	3	Bogunjoko (2021), Ton (2019), results of in-depth interviews [4, 5].
6	Risk attitude	RA	3	Abul (2019), Sajeev <i>et al.</i> (2021), results of in-depth interviews [6, 8].
7	Investment Decisions	ID	3	Sajeev <i>et al.</i> (2021), results of in-depth interviews [8].

Source: Proposal by author

### Research sample

A total of 672 survey responses were collected; however, only 558 were deemed valid for analysis after data screening. The results indicate that the proportion of Generation Z participants engaged in securities investment in Vietnam is relatively high, with the majority being university students or postgraduates. Despite this level of educational attainment, their practical investment experience remains limited. Most respondents reported managing trading accounts with modest capital—primarily under 1 billion VND—and achieving relatively low returns, typically below 10%. A detailed statistical summary of the sample's demographic and investment characteristics is presented in **Table 2**.

**Table 2.** Descriptive statistics of the study sample

Factor	Observed variables	Frequency	Weight
Gender	Male	320	57.35%
	Female	234	41.94%
	Other	4	0.72%
Academic level	High school	29	5.2%
	Colleges	14	2.51%
	Universities	419	75.09%
	Post-Graduate	96	17.2%
Number of years of experience in	Below 1 year	194	34.77%

investment	From 1-3 years	168	30.11%
	From 3-5 years	129	23.11%
	More than 5 years	67	12.01%
Total value of the trading account	Under VND 50 million	206	36.92%
	From 50 million – 300 million VND	186	33.33%
	From 300 million – 1 billion VND	97	17.38%
	From 1 billion – 5 billion VND	37	6.63%
	From 5 billion – 10 billion VND	18	3.23%
Results of stock investment over time	Over 10 billion VND	14	2.51%
	Loss	207	37.10%
	Profit less than 10%	250	44.80%
	Profit ranging from 10-30%	67	12.01%
	Profit ranging from 30-50%	19	3.40%
	Profits over 50%	15	2.69%

Source: Proposal by author

### Data processing

To guarantee the measurement scales were both reliable and valid, several statistical techniques were utilized. The internal consistency of the scales was first checked using Cronbach's Alpha, where a coefficient above 0.7 was considered sufficient for reliability. Next, exploratory factor analysis (EFA) was performed to examine whether the items grouped as expected, ensuring both convergent and discriminant validity. The criteria applied for factor retention included factor loadings higher than 0.5, a Kaiser-Meyer-Olkin (KMO) measure ranging from 0.5 to 1, significance levels below 0.05, and cumulative variance explained above 50%. The Varimax rotation method was chosen to clarify factor structure.

Following EFA, confirmatory factor analysis (CFA) was conducted using AMOS software to further verify the model's measurement structure. Goodness-of-fit was evaluated through multiple indices, including a chi-square divided by degrees of freedom ratio ( $\chi^2/df$ ) less than 3 [40], along with GFI, TLI, and CFI values exceeding 0.8 [41], and an RMSEA value under 0.05 [42].

To test the hypothesized relationships among constructs, structural equation modeling (SEM) was employed. The SEM analysis followed the same fit criteria, allowing for comprehensive evaluation of the proposed model.

## Results and Discussion

### Reliability assessment

The findings from the Cronbach's Alpha analysis confirm that the scales used in this study are reliable, with all constructs surpassing the minimum threshold of 0.7. Moreover, the analysis of "Cronbach's Alpha if Item Deleted" showed lower values compared to the overall alpha for each variable, indicating that all items contribute positively to the scale reliability (Table 3).

**Table 3.** Descriptive statistics of the study sample

No	Variable	Code	Cronbach's Alpha
1	Herding behavior	HB	0.850
2	Overconfidence	OCF	0.910
3	Fear of missing out.	FOMO	0.887
4	Framing	FRA	0.891
5	Representativeness	REP	0.904
6	Risk attitude	RA	0.762
7	Investment Decision (Dependent Variable)	ID	0.910

Source: Proposal by author

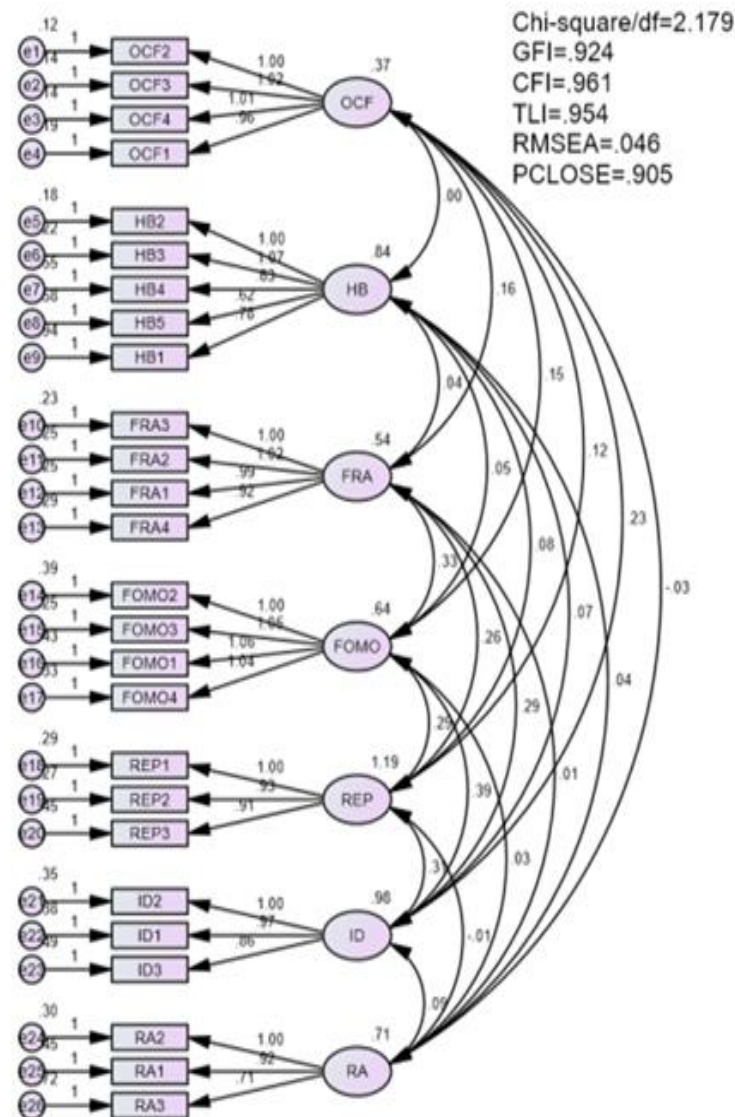
### Analysis

The exploratory factor analysis (EFA) confirmed that the data were well-suited for factor extraction. All factor loadings exceeded 0.5, indicating strong correlations between the observed variables and their respective factors within the model. Several criteria were met to ensure data adequacy: the Kaiser-Meyer-Olkin (KMO) measure was 0.840 for the independent variables and 0.728 for the dependent variable, both comfortably within the acceptable range of 0.5 to 1. Additionally, the variance explained by the independent variables was 73.994%, while the dependent variable accounted for 78.352%, both

well above the 50% threshold. These results support both convergent validity, where observed variables load strongly onto one factor, and discriminant validity, which ensures factors are distinct from each other.

### Confirmatory factor analysis (CFA)

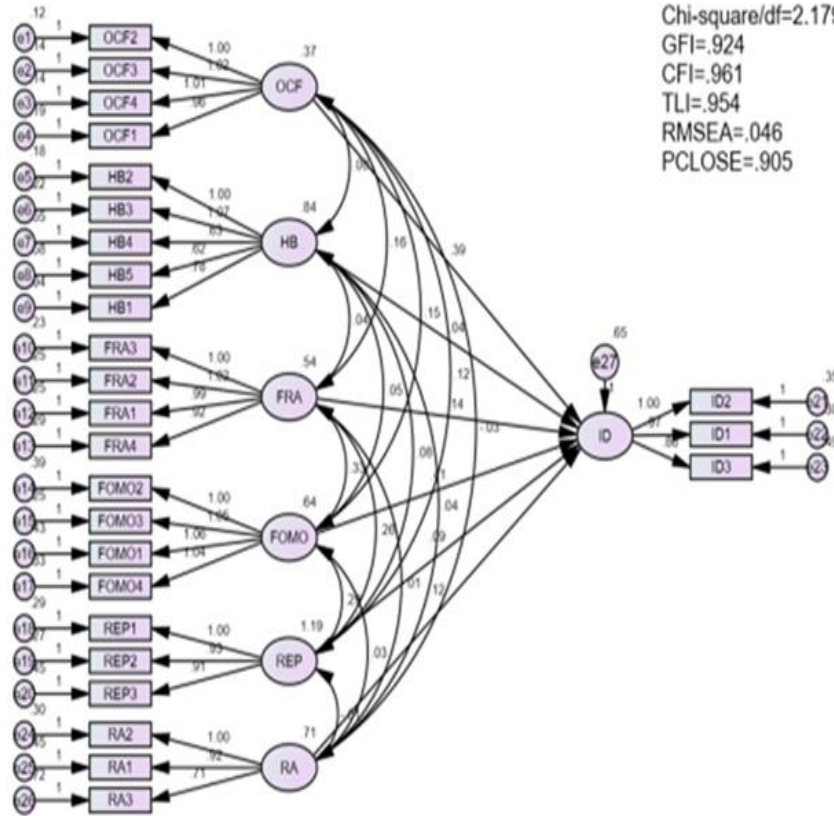
The CFA results, illustrated in **Figure 2**, demonstrated that the proposed model fits the data well, according to established standards [43]. All factor loadings were above 0.5, confirming that the variables are significant indicators of their constructs. The model's fit indices further support its adequacy: chi-square divided by degrees of freedom ( $\chi^2/df$ ) was 2.179, which is below the acceptable limit of 3; goodness-of-fit index (GFI) was 0.924, exceeding the 0.9 threshold; Tucker-Lewis index (TLI) was 0.954 and comparative fit index (CFI) was 0.961, both surpassing 0.95; and the root mean square error of approximation (RMSEA) was 0.046, comfortably below the 0.06 cut-off. These indicators collectively suggest that the model reliably represents the underlying data structure.



**Figure 2.** CFA analysis.  
Source: Proposal by author

### Structural equation modeling results (SEM)

Conducting SEM model analysis for the research model in **Figure 3**, we find that the aggregate indicators are satisfactory. Specifically, Chi-square/df = 2.179 (<3); GFI = 0.924 (>0.8); TLI = 0.954 (>0.8); CFI = 0.961 (>0.8); RMSEA = 0.046 (<0.05).



**Figure 3.** SEM Model Analysis  
 Source: Proposal by author

**Table 4.** Coefficient estimates of model parameters

Hypothesis	Relationship	Weight	S.E.	C.R.	P	Conclusion
H2	ID <--- OCF	.387	.073	5.290	***	Accepted
H1	ID <--- HB	.037	.044	.835	.403	Rejected
H4	ID <--- FRA	.135	.074	1.833	.067	Rejected
H3	ID <--- FOMO	.406	.069	5.860	***	Accepted
H5	ID <--- REP	.093	.041	2.300	.021	Accepted
H6	ID <--- RA	.123	.051	2.386	.017	Accepted

**Table 4** illustrates that the proposed research model exerts a significant, positive, and relevant influence on the behavioral financial factors affecting the stock investment decisions of Generation Z in Vietnam. Among the hypotheses tested, H2, H3, H5, and H6 were supported, whereas H1 and H4 were not confirmed.

The findings reveal that behavioral factors such as overconfidence, fear of missing out, representativeness, and risk attitude play a crucial role in shaping the investment choices of Generation Z investors in Vietnam. Conversely, herding behavior and framing did not demonstrate a significant effect on their decisions.

This outcome highlights a notable difference in investment behavior between Generation Z and earlier generations, supporting insights from Chiang and Zheng (2010), Abul (2019), and Ton (2019) [5, 6, 17]. Generation Z’s stronger sense of group connection fosters open discussion and information sharing, yet their financial literacy and technological savvy enable them to act independently and thoughtfully, reducing susceptibility to herd mentality. In contrast, Ton’s (2019) research on the Vietnamese stock market primarily involved older investors who often lacked financial knowledge and tended to rely on brokers or friends when making investment decisions [5].

Interestingly, this study found that framing does not significantly influence Generation Z’s investment decisions, diverging from the conclusions of Ritter (2003) and Wahla *et al.* (2019) [28, 30]. Wahla *et al.* suggest that investors are more vulnerable to framing biases when they struggle to fully understand information. However, Generation Z investors tend to possess the skills and knowledge to critically evaluate financial information from diverse sources, as noted by Stuenkel *et al.* (2005) and Harputlu and Kendirli (2019) [44, 45]. This capacity likely explains why framing does not affect their investment choices, underscoring a shift in behavior compared to previous cohorts.

Overconfidence, on the other hand, significantly and positively influences Generation Z’s stock investment decisions at the 95% confidence level. This aligns with earlier studies by Ton and Dao (2014), Scheinkman and Xiong (2003), and Bakar and Yi (2016) [13, 21, 24]. In the Vietnamese context, early financial education combined with adept use of technology for

research appears to boost Gen Z's confidence beyond that of prior generations. Nevertheless, this heightened confidence and fast decision-making can sometimes lead to unfavorable outcomes, as reflected in the sample data showing that most Generation Z investors either incur losses or gain less than 10% on their investments.

Additionally, the fear of missing out (FOMO) has a significant influence on the stock investment decisions of Generation Z in Vietnam, supported at a 95% confidence level. While FOMO is commonly explored in consumer psychology, shopping habits, and entertainment contexts, it has been relatively overlooked in investment behavior research. Thus, introducing the fear of missing out as a factor represents a novel contribution to understanding how behavioral traits affect stock market decisions. Unlike herd mentality, which involves uncritically following the crowd, Generation Z's investment motivation stems from a desire not to miss promising opportunities. With ambitions such as achieving early financial independence, retiring early, or matching the success of their peers, they are driven to actively participate in the stock market.

Moreover, representativeness also exerts a significant positive effect on Generation Z's investment choices at a 95% confidence interval. This aligns with findings from Ton (2019) and Bogunjoko (2021) [4, 5]. This tendency can be explained by Generation Z's inclination to make rapid decisions with limited financial resources and time. Consequently, they often rely on past experiences or similarities to prior situations when deciding on investments.

### *Recommendations*

Drawing on the study's results, several recommendations are proposed to help tailor securities investment strategies for Generation Z investors. It is advised that these investors manage the frequency and risk of their trades carefully, maintain composure, and base their decisions on well-developed strategies and analytical methods. Avoiding emotional or psychological biases is crucial, especially refraining from buying stocks without a clear understanding or proper analysis of their real growth potential, particularly those currently attracting high market demand. Investors should consider both recent and long-term data on issuers before making decisions.

Furthermore, personal finance and investment education should be integrated into general and university curricula. Given Generation Z's goals of early retirement and financial freedom, combined with peer influence, early exposure to investment concepts is vital. Equipping students with financial literacy during their schooling enables more informed decision-making later in life. Incorporating financial and investment topics into practical subjects such as high school mathematics can also be beneficial.

To protect novice investors, educational initiatives and financial awareness campaigns should be expanded. Authorities need to monitor and control misinformation spread through media channels. Securities companies must be held accountable and sanctioned if found guilty of manipulating information.

### **Conclusion**

Stock investment is still a relatively new activity for Generation Z in Vietnam and has not been widely studied. Previous research on investment decisions has mostly focused on individual investors broadly, with little attention to Generation Z's distinct behavioral psychology, including the fear of missing out, a concept well researched in consumer and entertainment contexts but less so in finance. This study seeks to fill that gap.

The findings show that overconfidence, fear of missing out, representativeness, and risk attitudes significantly shape the investment decisions of Generation Z. In contrast, herding behavior and framing do not appear to have a meaningful impact. The study has limitations, notably its exclusive focus on Generation Z without comparison to other generations like X or Y. Additionally, since fear of missing out is a newly introduced variable in this model, further research is needed to fully understand its role. Future studies should broaden their scope to include investors from multiple generations to deepen insights into the behavioral drivers behind investment decisions.

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