

Factors Influencing Investment Decision-Making among College Students: An Empirical Study

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Abstract

Investment decisions describe the choices individuals make about where, when, and how much to invest. Prior research shows that these decisions are shaped by a combination of financial knowledge and behavioural biases, but findings on which factors matter most are mixed and often depend heavily on the population studied. This study examines the effect of five factors identified in prior research – financial literacy, financial attitude, regret aversion bias, herding, and risk tolerance – on investment decisions among a broader, more academically mixed sample of 261 college students than has typically been studied. Two objectives guided the study: first, to test whether these five factors significantly affect students' investment decisions; and second, to identify which of these factors carries the strongest influence. Data were collected through a structured online questionnaire and analyzed using multiple linear regression. The results show that financial attitude and herding are significant, positive predictors of investment decisions, with herding carrying a marginally stronger standardized effect than financial attitude. Financial literacy, regret aversion bias, and risk tolerance were not significant predictors in this sample. Together, the five factors explain about 16 percent of the variance in investment decisions. These findings suggest that among college students, day-to-day attitudes toward money and social influence from peers and social media play a larger role in shaping investment decisions than formal financial knowledge, fear of regret, or stated willingness to take risk. The study offers practical guidance for universities and financial educators on where to focus limited financial literacy resources.

Keywords: investment decision; financial literacy; financial attitude; regret aversion bias; herding; risk tolerance; college students

1. Introduction

Financial markets grow when more people take part in them. Every new investor who buys a share, a bond, or a mutual fund adds capital that businesses can use to expand, and a healthy flow of individual investment is widely seen as a sign of a maturing economy. Over the past decade, one group has entered this picture in growing numbers: college students. Low-cost, app-based investment platforms have removed many of the old barriers to investing, such as high minimum balances and broker commissions, so that even students with modest allowances now have the tools to buy stocks, mutual funds, gold, or cryptocurrency from a phone. This shift means that understanding how young, first-time investors make decisions is no longer a side topic in finance research – it is central to understanding where a large and growing share of new capital is coming from.

At the same time, decades of behavioural finance research have shown that investment decisions are rarely made through cold, rational calculation alone. Psychological tendencies such as fear of loss and the urge

to copy what others are doing shape how people invest, sometimes more strongly than financial knowledge itself. This creates a practical question for universities and financial educators: which of these factors actually matters most for young investors, and does simply teaching financial facts move the needle at all. A recent study by Hidayat and Hartono (2022), published in BISMA (Bisnis dan Manajemen), offers one of the more complete answers to this question available for the student population. Using a structural equation model on a sample of 230 undergraduate students who were active members of a capital market community, they found that financial literacy, financial attitude, regret aversion bias, and herding all significantly influenced investment decisions, while risk tolerance did not. Their study is a valuable starting point, but it leaves an open question: does the same pattern hold in a broader, more academically mixed student population, rather than one made up entirely of students who have already self-selected into an investing-focused community.

This study addresses that question using survey data from a more diverse group of college students, spanning several academic fields rather than a single investment club. Two objectives guide the analysis:

Objective 1: To examine the effect of financial literacy, financial attitude, regret aversion bias, herding, and risk tolerance on investment decisions among college students.

Objective 2: To identify which of these five factors has the strongest influence on college students' investment decisions.

By pursuing these two objectives, the study first checks whether the behavioural factors identified by Hidayat and Hartono (2022) hold in a broader student sample, and then ranks their relative importance. The results are intended to be useful for researchers seeking to understand which behavioural finance factors travel well across different student populations, and for universities and financial educators seeking to prioritize limited resources when designing financial education programs for young investors.

2. Literature Review and Hypothesis Development

2.1 Theoretical Background

Three theoretical traditions inform this study. Classical finance theory assumes that investors act rationally, weighing risk and return to maximize their wealth (Chandra, 2008; Hens & Riege, 2016). Under this view, financial literacy and financial attitude matter because they equip an investor to reason correctly about risk and return. Behavioral finance theory challenges the assumption of full rationality, arguing that cognitive shortcuts and social pressures – such as copying the choices of other investors, known as herding – systematically shape financial choices (Waweru et al., 2008; Setiawan et al., 2018). Prospect theory (Kahneman & Tversky, 1979) adds that investors evaluate outcomes relative to a reference point rather than final wealth, and that they weigh the pain of a loss more heavily than the pleasure of an equivalent gain. This asymmetry helps explain regret aversion bias, in which investors become overly cautious after a past loss (Gupta & Ahmed, 2016). Together, these three perspectives suggest that a complete picture of student investment decisions needs to combine what students know (literacy), how they feel about money (attitude), how they respond emotionally to risk and past mistakes (regret aversion, risk tolerance), and how they respond to their social environment (herding).

2.2 Investment Decisions

An investment decision is the choice to commit current resources with the expectation of a future return (Hidayati, 2017; Mutawally & Asandimitra, 2019). For a college student, this can mean anything from putting a small amount into a mutual fund to buying gold or shares. Because students typically have limited income and limited experience, their investment decisions are especially useful for studying how financial

behavior develops before it has been shaped by years of market participation.

2.3 Financial Literacy and Investment Decisions

Financial literacy refers to the knowledge and skills needed to understand basic financial concepts, such as the relationship between risk and return and the value of diversification (OJK, 2017; Ariani et al., 2016). Investors with stronger financial literacy are, in theory, better equipped to evaluate investment options and avoid costly mistakes (Sezer & Demir, 2015; Son & Park, 2019). Hidayat and Hartono (2022) found a strong positive effect of financial literacy on investment decisions among Indonesian investment-club members, consistent with several other studies (Rasyid et al., 2018; Chen et al., 2018). However, other studies report no significant effect (Pradikasari & Isbanah, 2018; Mutawally & Asandimitra, 2019; Ady & Hidayat, 2019), and a broader literature on the knowledge–action gap suggests that literacy on its own is often an unreliable predictor of financial behavior (Chen & Volpe, 1998; Lusardi & Mitchell, 2014). Based on this mixed evidence, the following hypothesis is proposed:

H1: Financial literacy has a significant effect on college students' investment decisions.

2.4 Financial Attitude and Investment Decisions

Financial attitude describes a person's outlook toward money – whether they lean toward saving, planning, and careful budgeting, or toward impulsive spending (Rafiqah et al., 2019; Anthony, 2011). A positive financial attitude has been linked to more disciplined financial behavior, including investing (Ho & Lee, 2020; Garg & Singh, 2018), and Hidayat and Hartono (2022) found that financial attitude significantly affected investment decisions among Indonesian students. This leads to the second hypothesis:

H2: Financial attitude has a significant effect on college students' investment decisions.

2.5 Regret Aversion Bias and Investment Decisions

Regret aversion bias is the tendency to avoid decisions that could lead to future regret, often because of a past loss (Gupta & Ahmed, 2016; Budiarto, 2017). An investor who has been burned before may become overly cautious, holding onto safe assets or avoiding unfamiliar products altogether. Budiarto (2017) and Hidayat and Hartono (2022) found this bias significantly shaped investment decisions, while Pujiyanto and Mahastanti (2013) found no significant relationship. Given this mixed evidence, the study proposes:

H3: Regret aversion bias has a significant effect on college students' investment decisions.

2.6 Herding and Investment Decisions

Herding is the tendency to follow the investment choices of others – friends, family, or, increasingly, voices on social media – rather than relying purely on one's own analysis (Setiawan et al., 2018; Kumar & Goyal, 2015). For a generation that gets much of its financial information from peers and online content creators rather than traditional advisors (CFA Institute, 2024), herding is an especially relevant factor. Mutawally and Asandimitra (2019) and Hidayat and Hartono (2022) both found herding to be a significant predictor of investment decisions. This supports the fourth hypothesis:

H4: Herding has a significant effect on college students' investment decisions.

2.7 Risk Tolerance and Investment Decisions

Risk tolerance is a person's willingness to accept the possibility of loss in exchange for the possibility of higher returns (Budiarto, 2017; Wulandari & Iramani, 2014). While some studies link higher risk tolerance to bolder investment decisions (Pradikasari & Isbanah, 2018; Ahmed et al., 2021), Hidayat and Hartono (2022) and Putra et al. (2016) both found no significant relationship among student samples, suggesting that students' willingness to accept risk on a survey does not always translate into how they actually decide to invest. The fifth hypothesis is therefore:

H5: Risk tolerance has a significant effect on college students' investment decisions.

2.8 Conceptual Framework

The research model tests five independent variables drawn from prior research – financial literacy (FL), financial attitude (FA), regret aversion bias (RA), herding (H), and risk tolerance (RT) – against a single dependent variable, investment decision (ID). All five variables are hypothesized to relate to investment decisions; the relative size of each significant coefficient is then used to address Objective 2, identifying which factor carries the strongest influence.

3. Research Method

3.1 Research Design : This study uses a quantitative, cross-sectional survey design. Primary data were collected through a structured online questionnaire distributed via Google Forms to college students. The questionnaire captured respondent demographics, investment habits, and Likert-scale items measuring each of the five independent variables and the dependent variable, investment decision.

3.2 Population and Sample : The population consists of college and university students. A convenience sampling approach was used, as the questionnaire was distributed through an open online link and completed voluntarily by respondents across a range of academic fields and year levels. A total of 268 responses were collected.

3.3 Measurement: Each variable was measured using a five-point Likert-type scale. Financial literacy, financial attitude, regret aversion bias, and risk tolerance were measured on an agreement scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Herding was measured on an extent scale from 1 (Not at all) to 5 (Extremely). Investment decision, the dependent variable, was measured on a strength-of-influence scale from 1 (Not at all) to 5 (Very strongly). Table 1 summarizes how each construct was operationalized.

Table 1. Operationalization of Variables

Variable	Code	Items	Definition
Financial Literacy	FL	3	Understanding of basic investing concepts, riskreturn relationship, and diversification
Financial Attitude	FA	2	Care taken in weighing risk and comparing expected returns before investing
Regret Aversion Bias	RA	1	Tendency to avoid investments not fully understood, out of fear of future regret
Risk Tolerance	RT	1	Willingness to accept higher risk for potentially higher returns
Herding	H	1	Influence of friends, family, and social media on investment choices
Investment Decision	ID	1	Overall strength with which the above factors influence investment decision-making

3.4 Data Analysis Technique: Data were analysed using multiple linear regression (Ordinary Least Squares), regressing investment decision on the five independent variables (FL, FA, RA, RT, H). Unstandardized coefficients (B) were used to test statistical significance (Objective 1), and standardized

coefficients (β) were used to compare the relative strength of each significant predictor on a common scale (Objective 2).

Before interpreting the regression results, the instrument and the data were checked using standard procedures. Internal consistency reliability was assessed with Cronbach's alpha for the two multi-item constructs (FL and FA); item validity was assessed with corrected itemtotal correlations. Multicollinearity was checked using the Variance Inflation Factor (VIF), and residual normality was checked using the Jarque-Bera test.

4. Data Analysis and Results

4.1 Respondent Profile

Table 2 summarizes the demographic profile of the 261 valid respondents.

Table 2. Respondent Profile

Characteristic	Category	n	%
Age	Below 18	16	6.1
	18–20	39	14.9
	21–23	167	64.0
	Above 23	39	14.9
Gender	Male	150	57.5
	Female	78	29.9
	Prefer not to say	22	8.4
	Other	11	4.2
Year of Study	1st year	22	8.4
	2nd year	26	10.0
	3rd year	46	17.6
	4th year	114	43.7
	Postgraduate	53	20.3
Field of Study	Finance/Commerce	53	20.3
	Engineering/Technology	113	43.3
	Management	37	14.2
	Arts/Humanities	31	11.9
	Science	16	6.1
	Other	11	4.2
Personal Income	Yes	73	28.0

	No	185	70.9
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The sample is dominated by students aged 21–23 (64.0 percent) and students in engineering/technology fields (43.3 percent), with finance/commerce students making up only about one-fifth of respondents (20.3 percent). This is a notably more mixed sample than the base study by Hidayat and Hartono (2022), whose respondents were all active members of a capital market community and were therefore more concentrated in finance-related fields. Most respondents (70.9 percent) reported having no personal source of income, and most (51.0 percent) said they make investment decisions only “occasionally.” This profile is consistent with a population of young, largely inexperienced investors.

4.2 Financial Literacy Level

Using the classification scheme applied by Chen and Volpe (1998) and adopted in the base study, respondents' average financial literacy score was converted to a percentage of the maximum possible score and grouped into three categories: low (below 60 percent), medium (60–80 percent), and high (above 80 percent). Table 3 shows the results.

Table 3. Financial Literacy Level

Category	n	%
Low (<60%)	50	19.2
Medium (60–80%)	171	65.5
High (>80%)	40	15.3

The majority of respondents (65.5 percent) fall into the medium literacy category, with relatively few in the high-literacy group (15.3 percent). This suggests that, unlike the base study's sample of investment-club members, most respondents in this study have only a moderate grasp of core investing concepts – a difference in sample composition that becomes relevant when interpreting the regression results below.

4.4 Descriptive Statistics

Table 5. Descriptive Statistics of Study Variables (n = 261)

Variable	Mean	Std. Dev.	Min	Max
Financial Literacy (FL)	3.31	0.83	1.00	5.00
Financial Attitude (FA)	3.27	0.83	1.00	5.00
Regret Aversion Bias (RA)	3.27	1.02	1	5
Risk Tolerance (RT)	3.30	1.02	1	5
Herding (H)	3.15	0.98	1	5

Investment Decision (ID)	3.02	1.00	1	5
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All variables were measured on a common 1–5 scale, and their means cluster fairly closely around the midpoint (3.02 to 3.31), indicating that, on average, respondents lean only mildly toward agreement with each statement rather than reporting extreme views in either direction.

4.5 Correlation Analysis

Table 6. Pearson Correlation Matrix

	FL	FA	RA	RT	H	ID
FL	1.000					
FA	0.598	1.000				
RA	0.345	0.464	1.000			
RT	0.476	0.437	0.388	1.000		
H	0.281	0.314	0.407	0.294	1.000	
ID	0.219	0.315	0.248	0.247	0.327	1.000

All five independent variables correlate positively with investment decision, ranging from a weak 0.219 (financial literacy) to a moderate 0.327 (herding). Herding shows the strongest simple correlation with investment decision, followed by financial attitude (0.315), foreshadowing the regression results below. Correlations among the independent variables are all below 0.60, an early sign that multicollinearity is unlikely to be a serious problem in the regression model (confirmed formally in Section 4.6).

4.6 Classical Assumption Tests :Two checks were performed before interpreting the regression coefficients. First, the Variance Inflation Factor (VIF) was calculated for every predictor; all VIF values ranged from 1.25 to 1.80, well below the common threshold of 10, indicating no problematic multicollinearity

4.7 Regression Results

Table 7 presents the regression results testing the effect of financial literacy, financial attitude, regret aversion bias, risk tolerance, and herding on investment decisions.

Table 7. Multiple Regression Results

Variable	B	Std. B (β)	Std. Error	t	Sig.	Result
(Constant)	1.185	—	0.287	4.126	0.000	
Financial Literacy (FL)	-0.023	-0.019	0.090	-0.250	0.803	H1 not supported
Financial Attitude (FA)	0.240	0.200	0.093	2.595	0.010	H2 supported
Regret Aversion Bias (RA)	0.034	0.034	0.068	0.498	0.619	H3 not supported

Risk Tolerance (RT)	0.085	0.087	0.067	1.271	0.205	H5 not supported
Herding (H)	0.234	0.230	0.065	3.592	0.000	H4 supported

$R^2 = 0.164$; $Adjusted\ R^2 = 0.148$; $F(5, 255) = 10.01$, $p < 0.001$. Dependent variable: Investment Decision.

The overall model is statistically significant ($p < 0.001$) and explains 16.4 percent of the variance in investment decisions (14.8 percent adjusted for the number of predictors). Of the five factors, only financial attitude ($B = 0.240$, $p = 0.010$) and herding ($B = 0.234$, $p < 0.001$) are statistically significant predictors. Financial literacy, regret aversion bias, and risk tolerance are not significant at the conventional 0.05 level, so H1, H3, and H5 are not supported, while H2 and H4 are supported.

Turning to Objective 2, the standardized coefficients allow the two significant predictors to be compared on the same scale. Herding has the larger standardized effect ($\beta = 0.230$) compared with financial attitude ($\beta = 0.200$), indicating that, among the two significant factors, social influence from friends, family, and social media plays a marginally stronger role in shaping college students' investment decisions than their general financial attitude.

4.8 Summary of Hypothesis Testing

Table 8. Summary of Hypothesis Testing Results

Hypothesis	Relationship	Result	Conclusion
H1	Financial literacy → Investment decision	$B = -0.023$, $p = 0.803$	Not supported
H2	Financial attitude → Investment decision	$B = 0.240$, $p = 0.010$	Supported
Hypothesis	Relationship	Result	Conclusion
H3	Regret aversion bias → Investment decision	$B = 0.034$, $p = 0.619$	Not supported
H4	Herding → Investment decision	$B = 0.234$, $p = 0.000$	Supported
H5	Risk tolerance → Investment decision	$B = 0.085$, $p = 0.205$	Not supported

5. Discussion

5.1 Financial Literacy Does Not Predict Investment Decisions

Contrary to Hidayat and Hartono (2022), who found a strong positive effect of financial literacy on investment decisions, this study finds no significant relationship. One likely explanation lies in the composition of the two samples. The base study surveyed members of a capital market community – students who had already self-selected into an investing-focused organization and were likely to have above-average financial literacy. This study's sample is broader and more mixed, with only 15.3 percent of respondents classified as having high financial literacy and engineering/technology students outnumbering finance/commerce students by more than two to one. In a more general student population, financial knowledge in the abstract may simply not translate into stronger investment decisions, which is

consistent with the wider “knowledge–action gap” documented in the financial literacy literature (Lusardi & Mitchell, 2014; Chen & Volpe, 1998).

5.2 Financial Attitude Significantly Shapes Investment Decisions

Financial attitude was a significant, positive predictor of investment decisions, supporting H2 and consistent with Hidayat and Hartono (2022) and the broader literature linking a careful, planning-oriented financial mindset to sounder financial behavior (Ho & Lee, 2020; Garg & Singh, 2018). Students who take the time to weigh risk and compare expected returns before investing appear to make more deliberate investment decisions overall. This result should, however, be interpreted with some caution given the financial attitude construct's relatively low reliability ($\alpha = 0.410$) in this study, which is discussed further as a limitation in Section 6.

5.3 Herding Is the Strongest Predictor of Investment Decisions

Herding was the strongest significant predictor in the model, supporting H4 and Hidayat and Hartono (2022), and its standardized effect ($\beta = 0.230$) was marginally larger than that of financial attitude ($\beta = 0.200$). This is consistent with the wider literature on the influence of friends, family, and social sources on young investors' choices (Mutawally & Asandimitra, 2019; CFA Institute, 2024). For a generation that increasingly draws financial information from peers and social media rather than from classrooms or professional advisors, it is perhaps unsurprising that social influence outweighs even a positive financial attitude. This does not necessarily mean herding is harmful – following informed peers can be a reasonable shortcut when direct financial knowledge is limited – but it does suggest that interventions aimed at improving investment decision quality cannot ignore the social context in which those decisions are made.

5.4 Risk Tolerance and Regret Aversion Remain Unrelated to Investment Decisions

Consistent with Hidayat and Hartono (2022) and Putra et al. (2016), risk tolerance showed no significant relationship with investment decisions, reinforcing the idea that how much risk students say they are willing to accept on a questionnaire does not reliably predict their actual decision-making. Regret aversion bias was also non-significant in this study, differing from Hidayat and Hartono (2022) but consistent with Pujiyanto and Mahastanti (2013). Because regret aversion and risk tolerance were each measured with a single survey item in this study, these null results should be treated as tentative rather than conclusive, and future research using multi-item scales for these constructs is warranted.

6. Conclusion, Implications, and Limitations

6.1 Conclusion

This study examined whether five behavioural factors identified by earlier research – financial literacy, financial attitude, regret aversion bias, herding, and risk tolerance – explain investment decisions in a broader, more academically mixed sample of college students. Of the five, only financial attitude and herding were significant predictors, together explaining about 16 percent of the variance in investment decisions. Financial literacy, regret aversion bias, and risk tolerance were not significant, a different pattern from the base study by Hidayat and Hartono (2022), most likely reflecting the more academically diverse and less investing-focused nature of this study's sample. Comparing the two significant factors directly, herding carried a marginally stronger standardized effect than financial attitude, indicating that social influence from friends, family, and social media plays the single largest role among the factors tested in shaping college students' investment decisions.

6.2 Theoretical Implications

This study contributes to the literature by testing Hidayat and Hartono's (2022) model in a more academi-

cally diverse student sample, showing that the effects of financial literacy, regret aversion bias, and risk tolerance found in a narrower, finance-focused population do not automatically generalize to a broader student population. This supports the view in the broader literature (Lusardi & Mitchell, 2014; Chen & Volpe, 1998) that the link between financial knowledge and financial behaviour is context-dependent rather than universal, and it highlights social influence as a comparatively robust predictor across different student populations.

6.3 Practical Implications

For universities, the finding that financial literacy does not significantly predict investment decisions in this broader sample suggests that lecture-based literacy content alone may have limited impact on how students actually decide to invest. Because financial attitude and, especially, herding were the strongest predictors, financial education programs may be more effective if they combine practical, attitude-shaping exercises (such as budgeting and goalsetting activities) with efforts to work through the peer and social-media channels that already carry the most influence over student investment decisions – for example, by training respected student peer mentors or partnering with credible student-facing financial content creators, rather than relying on formal channels alone.

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