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Factors affecting financial investment decisions: undergraduate student context

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Abstract
Investment decisions are decisions to allocate funds into firms of investment that will generate higher profits in the future. This study aims to examine factors affecting financial investment decisions in undergraduate student context. Undergraduate students become interesting to investigates since they started investing their monthly income. This study employs quantitative research and the structural equation model analysis method. A total of 230 undergraduate students responded to the survey. The findings of the study indicate that there are several factors which significantly affect student financial investment decision which are financial literacy, financial attitude, regret aversion bias, and herding. Risk tolerance does not influence student investment decision. Thus, this study implies the importance financial service institutions roles and universities in educating and providing insight to potential investors, i.e., undergraduate students. Efforts to improve investment decisions from an early age are essential since increasing the amount of investment is beneficial for a country's economy.

Keywords:
financial attitude; financial literacy; herding; regret aversion bias; risk tolerance.

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Introduction

The capital market in the economic system country performs two functions as a business facilitator in obtaining capital or funds from investors to start and develop their business. The public can use it to invest in various instruments provided, such as mutual funds and bonds. The capital market trades bonds, equities (stocks), mutual funds, and other instruments over a long period. The existence of the capital market is a good place for domestic and foreign investors has become the key to current economic growth in exports and investment (IDX, 2018). Previous research shows that capital market development correlates positively with

economic growth (Brasoveanu et al., 2008). Investment can be a crucial and vital component because it is related to finance, individual economies, and companies to increase life quality in the future (Harjono, 2012). Investment is a process of putting in some money to get more significant returns in the future (Halim, 2005).

Investment growth in Indonesia increased every year, proved by the increases in individual investors or single investor identification numbers. single investor identification (SID) is a single and special code issued by KSEI which is used by customers, investors, and/or other parties based on applicable regulations to conduct activities related to securities transactions and/or use other services either provided by KSEI or by other parties based on KSEI's approval or applicable regulations. Following the mandate of law number 8 of 1995 concerning capital markets, PT Kustodian Sentral Efek Indonesia (KSEI) is a depository and settlement institution (LPP) in the Indonesian capital market that provides regular, fair, efficient central custodian services, and securities transaction settlements. From the end of 2016 to 2019, SID constantly increase. At the end of 2017, the number of SIDs increased by 25.56 %. At the end of 2019, the number of SID increased from 1,619,372 to 2,409,075 or 48.77% (KSEI, 2018). The more the number of people who invest, the more investment decisions will be made, such as how much investment the individual will make and when the investment will be implemented (Sorongan, 2022).

Understanding economic activity, including investing in the capital market, must be learned as early as possible (Rauf, 2018). The group of 21-30 years dominates the Indonesian capital market. The student is the main highlight because students' investment significantly grows without good financial knowledge (KSEI, 2018). The investment gallery (GI), established by the Indonesian stock exchange (IDX) in universities, has an essential role in increasing SID in Indonesia (Mutawally & Asandimitra, 2019). In Indonesia, there are 413 GI spread throughout East Java province, the province with the most GI. There are 56 cities, and Surabaya has the most GI in East Java, with 17 GI in several universities (IDX, 2019). It becomes a good signal since undergraduate students should be able to manage their finances wisely while living apart from their parents. Students' investment indicates developed financial behaviour during college (Khalisarani et al., 2022). Investment decisions are still interesting to investigate. The right investment decisions are essential to produce an optimal performance that makes investment decisions interested in further research (Bahrun & Firmansyah, 2020).

Based on the previous research, the factors that can affect investment decisions are financial literacy (Rasyid et al., 2018), regret aversion bias (Budiarto, 2017), herding (Mutawally & Asandimitra, 2019), dan risk tolerance (Budiarto, 2017). Furthermore, financial attitude has a positive influence on financial behaviour, including investment (Ho & Lee, 2020).

The first factor is financial literacy which means individual and group understanding of financial management (OJK, 2017). Investment decisions based

on financial literacy are reflected in the rational attitude of an investor (Ariani et al., 2016). It is supported by Putri & Rahyuda (2017), who explains that investment decisions are affected by financial literacy. Financial literacy helps in managing financial resources effectively. Investors with meagre financial literacy are inclined towards irrational or unfavourable investment decisions (Sezer & Demir, 2015; Son & Park, 2019). However, Pradikasari & Isbanah (2018) said that financial literacy does not affect an investor's investment decision.

The second factor is a financial attitude, a psychological tendency that is easiest to express by showing a favourable or unfavourable attitude (Arifin, 2018). The vital role of financial attitudes in determining financial behaviour's success (Anthony, 2011). Garg & Singh (2018) reveals the interrelationship between financial attitude and financial behaviour in youth context. Financial attitudes can improve students' financial behaviour, i.e., spending, protection, and planning. Financial planning refers to deferred consumer gratification, such as saving present resources, and wealth accumulation through investment and repaying debts (Ho & Lee, 2020). Specifically, financial attitude has a significant effect on student investment decisions. The better one's financial attitude, the better one's attitude in managing their finances, including investment decisions (Sorongan, 2022).

The third factor is regret aversion bias which means the behaviour of fear of the adverse effects of unexpected investments from the past that will raise a precautionary motive for investors (Gupta & Ahmed, 2016). An investor loses profits because he holds on to an instrument that should have been released for too long. Investment decisions are influenced by regret aversion bias (Budiarto, 2017). However, Pujiyanto & Mahastanti (2013) stated that the regret aversion bias variable does not influence investment decisions. Regret aversion bias also had no significant adverse impact on investment decision making by young investor (Ady & Hidayat, 2019).

The fourth factor is herding which means imitating someone's behaviour (Setiawan et al., 2018). It can affect a person's decision even though the other person's decision is not necessarily good (Gozalie & Anastasia, 2015). It is supported by Mutawally & Asandimitra (2019), that investment decisions are influenced by herding. The equity investor herd behaviour and their decision-making in the stock market (Kamil & Abidin, 2017). However, Setiawan et al. (2018) said that herding does not influence investment decisions.

Financial risk tolerance is another important factor that has an important role in investment decision-making behaviour (Sitkin & Pablo, 1992; Van de Venter et al., 2012). Risk tolerance means the tolerance level of risk in investing. An investor will be braver in making investment decisions because of his high-risk tolerance (Budiarto, 2017). It is supported by Pradikasari & Isbanah (2018) that investment decisions are influenced by risk tolerance. However, Putra et al. (2016) said that the risk tolerance variable does not influence investment decisions.

This research analyses factors influencing students' investment decisions: financial literacy, financial attitude, regret aversion bias, herding, and risk tolerance. Therefore, the novelty of this study is focused on interrelationship between behavioural finance variables and risk behaviour variables that stated in prospect theory on investment decision.

Literature review

Classical finance theory

This theory suggests that an investor will take rational action in making investment decisions. Buying or selling assets by making a portfolio refers to the rational level of investment using unbiased reasoning (Chandra, 2008). This reasoning cannot be seen in the trade-off between risk and return. Generally, standard finance decisions assume that all investors maximise their wealth (return) (Masomi & Ghayekhloo, 2011). Rationality is an attitude of thinking about someone's mind and the proof with linear data and facts (Harjono, 2012). Classical finance remains the cornerstone of financial theory and be it only as a benchmark that helps us to judge how much fundamental markets deviate from efficiency and rationality (Hens & Riege, 2016). Classical finance theory is used as a theoretical basis for explaining how financial literacy and financial attitude variables can influence an investor's investment decisions (Ariani et al., 2016).

Behavioural finance theory

Behavioural finance theory explains how herding variables can affect an investor's investment decisions (Setiawan et al., 2018). This theory emphasizes that the rational trait is a trait that must be eliminated and cannot be highlighted as the only character of a person in conventional economics. Humans follow the cognitive illusions of psychology in decision-making, which is the basis of behavioural finance theory. There are two categories of cognitive illusion. The first is the illusion that appears through the heuristic decision process. The second is the illusion that appears through the adoption of metal frames, which are easily grouped in behavioural finance theory (Waweru et al., 2008). Behavioural finance enriches the real market's view and helps explain many more detailed phenomena that might be small on sunny days but decisive in rough weather (Hens & Riege, 2016).

Prospect theory

Prospect theory is an alternative method of explaining individuals' choices under risk conditions. It was designed, in essence, as a substitute for expected utility theory. The expected utility theory model did not fully describe how individuals make decisions in risky situations. Therefore, there were instances in which a decision-maker's choice could not be predicted (Kahneman & Tversky, 1979; Edwards, 1996).

This theory focuses on subjective decisions affected by the investor's value system. Prospect theory explains that someone under risk and uncertainty does not

always act rationally. Psychological and behavioural factors will affect the level of decision-making rationally (Pradikasari & Isbanah, 2018). Investment decisions made by investors are not only based on rational considerations because of the facts. A new phenomenon has been found which shows that rationality is often ignored. Prospect theory states that individual choices are influenced by a bias constantly motivated by psychological factors in uncertain circumstances. This prospect theory explains several states of mind that influence individual decision-making, including regret aversion, loss aversion, and mental accounting. The principles of prospect theory include value function, framing, psychological accounting, probability, and certainty effect (Usman, 2019).

Investment decisions

Investment uses current assets for future profits explain that investor needs to set goals for achievement in investing, including maximum profit achievement, prosperity for shareholders, sustainability, and national development (Hidayati, 2017; Mutawally & Asandimitra, 2019). According to Fridana & Asandimitra (2020), investment decision indicators consist of the following: money is an important goal in life; satisfied by money-saving than investing it; the stock market is unpredictable, so do not invest; invest large amounts of money in stocks; the uncertainty of market is the reason not to buy stocks, prefer to save money for an emergency, and budget money well.

Investment decision-making process is complicated, and investors require a significant amount of information before making any investment decision (Frank et al., 2013). Investment decision-making process is strategic and influenced by specific factors (Wu et al., 2012; Baker & Ricciardi, 2015). However, the investment decisions of highly rational, intuitive, and spontaneous individuals may be influenced less or not by default options (Gambetti, et al., 2022). Professional investors make their investment decisions based on empirical research. Meanwhile, individual investors tend to choose familiar investment vehicles and those associated with their fields of interest (Pool et al., 2012).

Financial literacy

Financial literacy is knowledge, skills, awareness, and combined behaviour in determining financial decisions with higher profits. This variable uses the basis of classical finance theory (Ariani et al., 2016). Skills, knowledge, and beliefs affect his financial behaviour. Knowledge increased affects the level of active participation in activities related to finance and more favourable financial behaviour in individuals. Without proper financial literacy, individuals will experience difficulties choosing the right investment products and potentially be exposed to fraud risks (OJK, 2017). Ariani et al. (2016) explain that the dimensions of financial literacy are classified into three categories: counting skills, understanding of basic finance, andß attitude toward financial decisions.

Financial literacy is important when well-informed investment decision-making is considered (Hilgert et al., 2003). Investors with good financial understanding can make investment decisions to achieve their expectations (Budiarto, 2017). An investor with a good understanding of literacy will make wise and brave risk investment decisions (Pradikasari & Isbanah, 2018). Investment decisions are positively influenced by financial literacy significantly (Rasyid et al., 2018; Chen et al., 2018; Ahmed et al., 2021). Low levels of financial literacy make an irrational investment decision; otherwise, investors having a high level of financial literacy make a better investment decision (Adil et al., 2022; Hilgert et al., 2003). Specifically, financial literacy has a significant effect on student investment decisions. Financial literacy can help increase knowledge and help manage finances or investment decisions (Sorongan, 2022). However, Mutawally & Asandimitra (2019) and Pradikasari & Isbanah (2018) stated that financial literacy does not influence investment decisions. It is supported by Budiarto (2017), Putra et al. (2016), and Ady & Hidayat (2019). Therefore, this study hypothesises:

H1: Financial literacy affects student investment decisions.

Financial attitude

Financial attitude is the mind, opinions, and judgments of a person who implements his financial attitude (Rafiqah et al., 2019). Financial attitude uses financial principles to generate and maintain value through good decision-making and resource management. The individual's financial attitude will help determine the individual's attitudes and behaviour regarding finances, management, budgeting, and how individual decisions are made in selecting the type of investment to be taken (Sorongan, 2022). According to Anthony (2011), the level of a person's financial attitude is measured by several indicators, including: (1) developing a saving pattern and sticking to it; (2) determining financial goals in spending on priority needs; (3) being responsible for one's financial well-being; (4) focus and concentrate when managing finances; (5) planning expenditures that are a priority and necessary; (6) planning for the future in achieving a prosperous life. Financial attitude also includes the application of one's financial principles so that they can be used to maintain and create value through appropriate management and decision-making (Humaira & Sagoro, 2018).

Financial attitude is one of the principles of financial application that can be used to maintain and create value through appropriate management and decision-making (Humaira & Sagoro, 2018). The higher a person's financial attitude, the better their financial behaviour, including investment decisions (Ho & Lee, 2020; Garg & Singh, 2018). Therefore, this study hypothesises:

H2: Financial attitude affects student investment decisions.

Regret aversion bias

Regret aversion bias is a regret of making the wrong decision and then experiencing a loss that raises caution to avoid similar mistakes (Budiarto, 2017). According to Gupta & Ahmed (2016), a person who regrets his decision will try to avoid the risk arising from two errors. The first is the implementation error that arises due to misdirection in the act. The second is negligence, which arises because of missed opportunities. Investors ask about his beliefs by reflecting on and expressing his decisions and the facts he made. This variable uses the prospect theory basis. The benchmark indicators for the regret aversion variable are biased according to research conducted by Putri & Isbanah (2020), which are regret for investing, experiencing a loss of investment, and the impact of losing for the next investment.

Regret aversion bias is a psychological state of investors that appears because of regret for making the wrong decision and then experiencing a loss that raises caution (Gupta & Ahmed, 2016). During decision-making, the human response often encounters regret aversion preferences and decision makers feel regret if they make the wrong decision (Chen et al., 2018). The more careful someone makes decisions because of past mistakes, the better their investment decisions will be in the future. Budiarto (2017) reinforce that regret aversion bias has a significant relationship with investment decisions. Meanwhile, according to Pujiyanto & Mahastanti (2013), regret aversion bias has no relationship with investment decisions. Therefore, this study hypothesises:

H3: Regret aversion bias affects student investment decisions.

Herding

Herding behaviour is occurred due to the magnitude of risk perception with stock returns (Shah et al., 2017). During herding, rational people behave irrationally by setting forth the other's judgment while making investment decisions (Kumar & Goyal, 2015). Intentional herding results from investors deliberately ignoring their personal information and preferring to follow other investors due to the lack of information. Unintentional herding is a situation that arises when some investors take the same decision and experience a condition with the same information. This variable uses behavioural finance theory as a basis. Herding follows the other investors' behaviour without conducting a fundamental analysis, resulting in inefficient market conditions (Setiawan et al., 2018).

Herding behaviour significantly affects investors' financial choices and decision-making processes (Kudryavtsev et al., 2013). Herding tends to follow other investor behaviour without conducting fundamental analysis, resulting in inefficient market conditions (Setiawan et al., 2018). It is supported by Mutawally & Asandimitra (2019), Jannah (2017), and Adil et al. (2022) that the relationship between herding and investment decisions has a significant positive relationship.

Meanwhile, according to Setiawan et al. (2018) and Gozalie & Anastasia (2015), herding does not affect investment decisions. Therefore, this study hypothesises:
H4: Herding affects students' investment decisions.

Risk tolerance

Risk tolerance is a person's ability to take investment risks (Budiarto, 2017). Age, socioeconomic status, career status, income, wealth, and income prospects have different levels for every investor (Wulandari & Iramani, 2014). Three categories based on investor relations with risk including: (1) risk seekers are investors who like risk; (2) risk neutrals, which are investors who do not tend to like or dislike risk; (3) risk averter are investors who do not like risk (Halim, 2005). To find out someone's risk level, investing can be done in several ways, such as: (1) income used for speculative investments; (2) income used to purchase instruments without consideration; (3) income used for investment that has the potential to provide significant returns.

Risk tolerance is the tolerance of a person's ability to accept the risk of investment decisions, and everyone has a different tolerance ability (Wulandari & Iramani, 2014). An investor's risk tolerance affects investment decisions, according to Pradikasari & Isbanah (2018), Budiarto (2017), and Ahmed et al. (2021). However, Putra et al. (2016) stated that risk tolerance does not influence investment decisions. Therefore, this study hypothesises:
H5: Risk tolerance affects student investment decisions.

Table 1
Variables

Variable	Number of Items	Source
Financial literacy	12	Chen & Volpe (1998)
Financial attitude	6	Anthony (2011)
Regret aversion bias	3	Sukamulja & Senoputri (2019)
Herding	2	Subash (2012)
Risk tolerance	3	Budiarto (2017)
Investment decision	5	Fridana & Asandimitra (2020)

Research method

This study is a causal conclusive method. This type of research is quantitative. Primary data is obtained through questionnaires distributed using google forms to the student's capital market community via Whatsapp group. The population of this study are students in Surabaya who have invested and are a member of the capital market community (CMC) organisation, which is an organisation for students who are interested in investment. The sampling technique used is purposive. The total of sample are 230 respondents. This study used parameter values of 9 out of 5-10 estimated parameters, multiplied by the number of indicators by 25, plus an error rate of 10%, and multiplied by 25 to obtain 230 questionnaires. The measurement scale uses a 4-points Likert scale for each variable. The number of measurement

items is available in Table 1. Table 1 also shows the source from which the measurement items were adapted. As for the scoring on questions about financial literacy using descriptive analysis methods. Chen & Volpe (1998) classify the level of financial literacy into three categories, i.e., low (less than 60%), medium (60% to 80%), and high (more than 80%). Structural equation model (SEM) with AMOS program is used as a data processing tool.

Data analysis and results

Respondents' characteristics

The respondents' characteristics in Appendix 1 are described based on the respondents' institution, gender, and income. Based on the institution, there are 112 UNESA students, 36 UINSA students, 30 STIE PERBANAS students, 18 ITS students, 17 UNTAG students, 16 UNAIR students, and 1 PPNS student as respondents. Based on gender, there are 142 male students and 88 female students. Based on income, 110 students have <IDR1,000,000 income per month; 49 students have IDR1,000,001–<IDR2,000,000 income per month; 21 students have IDR2,000,001–<IDR3,000,000 income per month; 15 students have IDR3,000,001–<IDR4,000,000 income per month; 14 students have >IDR4,000,000 income per month.

Table 2

Goodness of Fit Test Results

Goodness of fit index	Limit	Results	Information
CMIN/DF	2.00	1.4	Good
GFI	0.90	0.587	Marginal
AGFI	0.90	0.472	Marginal
TLI	0.90	0.91	Good
NFI	0.90	0.459	Marginal
RMSEA	0.05 - 0.08	0.06	Good

Validity and reliability test

The results of the validity test of this study in Appendix 2 indicate that the items used are valid because all the items used in this study get r arithmetic with a value greater than the value of the r table. The reliability test results show Cronbach's alpha with a value >0.70, which means reliable.

This study's outlier test indicates that the Mahalanobis distance results do not show the data detected as outliers. Because p2 has a value greater than 0.05, 230 data have met the outlier test and can be used to proceed to the next stage. The normality test results show that one data that exceeds the limit of cr (-2.58 to +2.58), namely X2.5, X2.6, and Y1.5, must be eliminated, and the rest are challenging to comply with the requirements because they have values in the range -2.58 to +2.58. The multivariate normality test is also generally distributed because it has a value of 1.779. So, the assumptions of univariate and multivariate normality have been met, and the data can be used for further stages.

Goodness of fit test

Based on this study's goodness of fit results in Table 2, three indexes with good information and three with marginal information were obtained. The research model's requirements are at least passing the three model tests. The model used in this study is accepted and can be continued to the next stage.

Hypothesis test

Figure 1 shows the pathway diagram which include financial literacy, financial attitude, regret aversion bias, herding, risk tolerance, and investment decision. Based Table 3, the results obtained are as follows. (1) The hypothesis test results show a CR value of 6.103 was 2.00 with a significance value (***) which is a small number and 0.05. It means that the financial literacy variable affects the decision variable. So H1 or hypothesis 1 is accepted. (2) The hypothesis test results show the CR value of -1.796 was 2.00 with a significance value of 0.042 and 0.05. The financial attitude variable affects the investment decision variable. So H2 or hypothesis 2 is accepted. (3) The table of hypothesis test results shows a CR value of -0.434 was 2.00 with a significance value of 0.014 and 0.05. The regret aversion bias variable affects the investment decision variable. So that H3 or hypothesis 3 is accepted. (4) The hypothesis test results show a CR value of 1.307 was 2.00 with significance values of 0.001 and 0.05. It means that the herding variable affects the investment decision variable. So H4 or hypothesis 4 is accepted. (5) The hypothesis test shows a CR value of -0.018 was 2.00 with a significance value of 0.986 and 0.05. The risk tolerance variable does not affect the investment decision variable. So H5 or hypothesis 5 is rejected.

Figure 1

Pathway Diagram

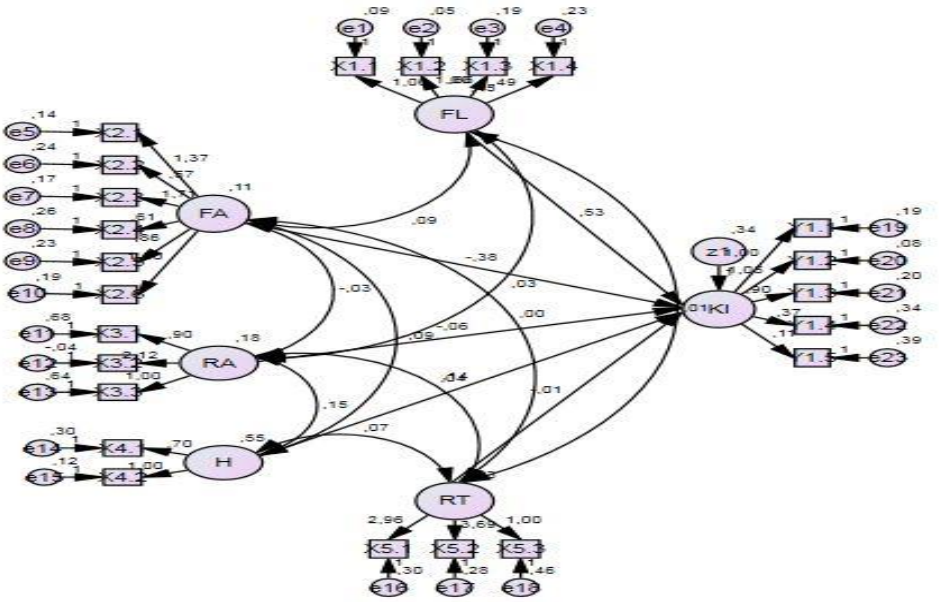

Table 3
Hypothesis Testing Results

Hypothesis	Estimate	SE	CR	P	Results
FL → KI	0.527	0.086	6,103	***	Accepted
FA → KI	-0.381	0.212	-1,796	0.042	Accepted
RA → KI	-0.062	0.143	-0.434	0.014	Accepted
H → KI	0.143	0.109	1,307	0.001	Accepted
RT → KI	-0.01	0.561	-0.018	0.986	Rejected

Discussion

The effect of financial literacy on investment decisions

This study supports Ariani et al. (2016) and Putri & Rahyuda, (2017) but rejects Pradikasari & Isbanah (2018). The results oshow that financial literacy influences investment decisions. This result is in line with classical finance theory as the theoretical basis. The result of the influence of financial literacy on investment decisions is possible because the object of research used is students. Students have a high curiosity supported by the speed of accessing information in this modern era. So financial literacy unconsciously increases, affecting students' rationalisation in determining attitudes. The result shows that the respondent's literacy level is high. In this study, a high literacy level affects investment decision. The statement supports that investment decisions taken and based on financial literacy are reflected in the rationality of an investor (Ariani et al., 2016). As managerial implications, the results of this study require companies and the Indonesia stock exchange (IDX) with the Investment gallery network to be more active in increasing the financial literacy of potential investors. This role can be carried out through the cooperation of four parties, including related policymakers, the financial services authority (OJK), IDX, educational institutions/universities, companies, and the public (potential investors).

The effect of financial attitude on investment decisions

The study results show that financial attitude influences investment decision variables. This result is in line with classical finance theory as the theoretical basis. This study supports Arifin (2018), Ho & Lee (2020), and Garg & Singh (2018). The influence of financial attitudes on investment decisions is possible because the respondents' ages determine respondents' ability to consider a good and bad decision. Students can create the most appropriate decisions for themselves. In addition, awareness of responsibility increases with increasing levels of education and age. Government, OJK, IDX, and universities are expected to design policies and educate students and public understanding and attitudes about financial service institutions and the variety of products and services available. This attitude is related to the perspective of investing and managing finances better to have implications for how to save, hoard, and utilise money.

The effect of regret aversion bias on investment decisions

This study supports Budiarto (2017) but rejects Pujiyanto & Mahastanti (2013). The result shows that regret aversion bias affects investment decisions. This result is in line with prospect theory as the theoretical basis. A descriptive analysis of respondents' answers in the variable regret aversion bias shows that most respondents have moderate fear behaviour. The influence of fear behaviour on investment decisions can be made possible because the research object is students who tend to be oriented to instant profits. Students have a less careful mindset and dares to take risks. It causes investors to lose profits because they hold on to instruments that should have been released for too long (Budiarto, 2017). This study results encourage stakeholders' involvement in financial services institutions to emphasise the importance of the precautionary principle in investing. The public needs to be educated so that past mistakes in investing should be a reference for investment decisions in the future.

The effect of herding on investment decisions

This study supports Gozalie & Anastasia (2015) and Mutawally & Asandimitra (2019) but not consistent with Setiawan et al. (2018). The results show that herding influences investment decisions. This result is in line with behavioural finance theory as the theoretical basis. Furthermore, most respondents have moderate imitating behaviour. The effect of imitating behaviour on investment decisions can be made possible by quickly accessing information to shape one's behaviour indirectly.

Similarly, the environment influences a person's behaviour. The previous submission conveys that this can affect a person's decision even though the other person's decision is not necessarily good (Gozalie & Anastasia, 2015). This study implies the importance of the role of financial service institutions and universities in providing insight to potential investors not only concerning the skills to calculate risk and return, introduction to basic financial concepts, and attitudes towards financial decisions, but also critical understanding in depth about financial behaviour in reading trends.

The effect of risk tolerance on investment decisions

This study supports Putra et al. (2016) but differs from Pradikasari & Isbanah (2018). This research shows that risk tolerance does not affect the investment decision. This result is in line with prospect theory as the theoretical basis. This modern era provides the broadest possible convenience so that all existing risks are easily overcome. In addition, investments that are becoming a trend now are considered profitable for investors.

On the other hand, students' curiosity is also high. To find out something, students dare to take existing risks (Putra et al., 2016). It signals to stakeholders that risk tolerance does not show different things for various classifications in society

so that education can continue to be carried out in all communities by emphasizing that anyone can make investments according to their risk preferences.

Conclusion

Financial literacy, financial attitude, regret aversion bias, and herding affect student investment decisions because respondents can access information quickly, even indirectly. The ease of finding this information is used as a reference in making investment decisions. However, the risk tolerance that does not affect investment decisions for students because of students unbalanced emotional stability. Students usually have short-term oriented decisions to get instant return, causing students to be less careful in making investment decision.

Based on the results of this study, the government is expected to improve programs that can encourage student investment decisions. For example, via capital market community (CMC), which is available almost on all campuses, students interested in investing can improve their ability and independence in investing. Young investors should increase their knowledge about how to invest appropriately and adequately, especially knowledge of financial literacy and attitude, as well as regret aversion bias and herding ability so they become independent in investing to increase national economic growth.

This study only included regret aversion as prospect theory variables that influence investment decision. Further researchers are expected to add more prospect theory variables such as loss aversion, mental accounting value function, framing, psychological accounting, probability, and certainty effect.

Author contribution

Febrian Satriya Hidayat: Methodology & Writing - Original Draft. **Ulil Hartono:** Conceptualization & Writing - Review & Editing.

Declaration of interest

The authors affirm that they have no known financial or interpersonal conflicts that would have appeared to have an impact on the research presented in this study.

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Appendix 1

Respondent Characteristics

Characteristics of respondents		Amount	Percentage
Campus origin	ITS	18	7.8
	PERBANAS	30	13.0
	PPNS	1	,4
	UNSA	36	15.7
	UNAIR	16	7.0
	UNESA	112	48.7
Gender	Man	142	61.7
	Woman	88	38.3
Income	<IDR 1,000,000	110	47.8
	Rp1,000,001 - Rp2,000,000	49	21.3
	IDR 2,000,001 - IDR 3,000,000	21	9.1
	IDR 3,000,001 - IDR 4,000,000	21	9.1
	IDR 4,000,001 - IDR 5,000,000	15	6.5

Appendix 2

Validity and Reliability Test Results

Construct	Validity			Reliability
	Indicators	r	r Table	Cronbach's alpha
Financial literacy				0,928
	X1.1.1	0,515	0,361	
	X1.1.2	0,854		
	X1.1.3	0,854		
	X1.2.1	0,854		
	X1.2.2	0,854		
	X1.2.3	0,690		
	X1.3.1	0,763		
	X1.3.2	0,854		
	X1.3.3	0,467		
	X1.4.1	0,763		
	X1.4.2	0,461		
	X1.4.3	0,585		
Financial attitude				0,832
	X2.1.1	0,609	0,361	
	X2.1.2	0,408		
	X2.1.3	0,713		
	X2.1.4	0,382		
	X2.1.5	0,722		
	X2.1.6	0,769		
Regret aversion bias				0,838
	X3.1.1	0,803	0,361	
	X3.1.2	0,692		
	X3.1.3	0,747		
Herding				0,900
	X4.1.1	0,878	0,361	
	X4.1.2	0,815		
Risk tolerance				0,785
	X5.1.1	0,763	0,361	
	X5.1.2	0,657		
	X5.1.3	0,634		
Investment decision				0,793
	Y1.1.1	0,469	0,361	
	Y1.1.2	0,519		
	Y1.1.3	0,768		
	Y1.1.4	0,506		
	Y1.1.5	0,477		