

UDC 332

ANALYSIS OF FACTORS AFFECTING STUDENT INVESTMENT DECISIONS ON THE INDONESIA STOCK EXCHANGE: A STUDY ON INVESTORS INVESTMENT GALLERY IN DENPASAR

Dewi Putu Juli Anita*, Artini Luh Gede Sri

Faculty of Economics and Business, University of Udayana, Bali, Indonesia

*E-mail: julianitadewi30@gmail.com

ABSTRACT

The increasing number of investors throughout 2020 shows the high interest of students to invest in stocks in the midst of the Covid-19 pandemic situation. Based on data from the Capital Market Study Group (KSPM - Kelompok Studi Pasar Modal) at several universities in Denpasar, it shows a phenomenon that not all investment galleries in Denpasar experienced an increase in the number of new investors throughout 2020. This phenomenon illustrates the existence of various factors that can influence student investment decisions when investing in the capital market through investment galleries. There are factors that come from within the individual which includes financial literacy; sociodemographic factors; emotional and psychological factors that can cause bias such as overconfidence bias and representativeness bias; and the level of risk tolerance. The service quality of the investment gallery is a factor that comes from the student environment. Study respondents were students from six universities in Denpasar City with a total sample of 90 people. The sampling technique used was purposive sampling technique. Data analysis was performed using multiple linear regression analysis techniques. The results showed partially (t test) and simultaneously (F test) financial literacy variables, sociodemographic factors, overconfidence bias, representativeness bias, risk tolerance, and the service quality of the investment gallery have significant positive effect on student investment decisions. Based on the results of statistical data, it is known that the sociodemographic variable, namely gender, has the greatest influence in determining investment decision behavior.

KEY WORDS

Financial literacy, sociodemographic factors, overconfidence bias, representativeness bias, risk tolerance, investment gallery service quality, and investment decisions.

Investment is one way that people can do to live a better future. The purpose of investment is to increase the value of wealth in anticipation of uncertainty. The increasing public interest in investing in stocks can be seen from the number of investors which reached 3.53 million throughout 2020, this number has increased by 42 percent compared to 31 December 2019 which was only 2.48 million (Bisnis tempo.com, 19 March 2021). The increase in the number of investors shows that investment activity in the Indonesian capital market remains high, even though in 2019 the world economy, including Indonesia, was shaken by the Covid-19 pandemic. This condition proves that investor's investment decisions in the capital market are not influenced by the COVID-19 pandemic. The Indonesia Stock Exchange (IDX) noted that since March 2020 there has been an increase of 1,000 new investors in a month and the most investors came from private employees and students (Bali post.com, 12 June 2020).

The increasing number of investors in the capital market from among students, especially in Denpasar City, cannot be separated from the support of the Indonesia Stock Exchange (IDX) in educating the public through collaboration with securities companies and several universities in Bali to establish investment galleries. The purpose of establishing an investment gallery is to increase the amount of investment in the Indonesian capital market, but based on data from the Capital Market Study Group (KSPM) at several universities in Denpasar, it shows that not all investment galleries in Denpasar experienced an increase in the number of investors in 2020. This illustrates that there are various factors that can

influence student investment decisions to invest in each investment gallery in Denpasar, causing differences in the number of students investing in each investment gallery.

Student decisions to invest in the capital market can be influenced by various factors, such as financial literacy, sociodemographic factors, risk tolerance, overconfidence bias and representativeness bias. In addition, the factors that come from the student environment are also able to influence student investment decisions, namely the quality of investment gallery services. The first factor that influences student investment decisions is financial literacy. Research conducted by Putri & Hikmah (2020); Dewi & Krisnawati (2020); Wirawan et al (2019); and Aren & Zengin (2016) stated that financial literacy has a positive effect on investment decisions. Other research conducted by Putri & Yuyun (2020); Ady & Hidayat (2019); Rafinza (2018); Pradikasari & Yuyun (2018); Budiarto & Susanti (2017); and Vuthalova (2015) stated that financial literacy did not affect investment decisions.

Sociodemographic factors consisting of gender and age are the second factor that can influence student investment decisions. The influence of student demographic factors should also be considered in making investment decisions, because an investment process often involves more than one individual. The results of research from Putri and Rahyuda (2017) also state the same thing, namely gender can affect individual investment decisions. Other research conducted by Putri and Yuyun (2020); Wirawan et al (2019); and Windayani and Krisnawati (2019) found different results that sociodemographic factors consisting of gender and age did not influence investment decisions.

The third factor that can also influence student investment decisions is the existence of psychological factors that can make students tend to be irrational in making investment decisions. The effect of emotional and psychological factors in decision making will lead to several biases in decision making called behavioral bias which can eventually lead to errors in decision making. Behavioral bias is divided into 2 (two) types, namely cognitive bias and emotional bias. Representativeness bias is an example of cognitive bias and overconfidence bias is an example of emotional bias. Based on the results of research conducted by Ariefin and Surya (2020); Daughter and Wisdom (2020); Dewi and Krisnawati (2020); Ady and Hidayat (2019); Rafinza (2018); Pradikasari and Yuyun (2018); Budiarto and Susanti (2017); and Nugraha (2016) stated that the overconfidence bias has a significant effect on investment decisions. Another study conducted by Wulandari and Iramani (2014:65) found different results, namely the overconfidence bias had no significant effect on investment decisions. Research on the influence of Representativeness bias has a positive effect on investment decisions has been carried out by Loris and Jayanto (2021); Putri and Halmawati (2020); and Filip - Mihai Toma (2015). Research conducted by Vitmiasih, et al (2021) states that Representativeness bias has a negative effect on investment decisions.

The fourth factor that can influence student investment decisions is risk tolerance. An investment decision that will be chosen and the amount of funds to be invested is strongly influenced by the risk tolerance of each individual student. The higher a person's level of financial literacy, the more likely they are to dare to take investment decisions with higher risk. Research conducted by Putra et al (2016) found that risk tolerance does not affect investment decisions, but research conducted by Putri and Hikmah (2020); Dewi and Krisnawati (2020); Nadya and Lutfi (2018); Ady and Hidayat (2019); Pradikasari and Yuyun (2018); and Budiarto and Susanti (2017) found that risk tolerance has a positive effect on investment decisions.

Another factor that can also influence student investment decisions in the capital market is the quality of investment gallery services. This factor is a factor that comes from outside the student which will indirectly affect investor's investment decisions. The existence of the Servqual (Service Quality) model developed by Parasuraman, Zeithaml, and Berry (1990) is a reference that an investment gallery that provides services to investors needs to improve its service quality so that it continues to be able to increase the number of new investors in accordance with the purpose of establishing an investment gallery. Service quality can be determined by comparing student perceptions of services from investment galleries that are actually received/obtained by students with the services students actually expect on service attributes from investment galleries. If the service received or perceived is

as expected, the service quality is perceived to be good, otherwise if the service received is lower than expected, the service quality is perceived to be poor. According to Kotler and Keller (2016: 442) there are 5 (five) dimensions that can be used to determine service quality, namely: Tangibles (physical evidence); Reliability; Responsiveness (sensitivity); Assurance (guarantee); and Empathy. Based on research conducted by Munawar, et al (2019), Wahyudi (2017) and Novita and Crishtin (2016), shows that the quality of service from investment galleries influences student investment decisions.

The current development of financial markets highlights the difference between traditional finance and behavioral finance which is based on behavioral finance theory. Traditional financial theory assumes that every investor makes rational decisions. In fact, each individual will be influenced by psychological factors that will affect the investment decisions taken. This fact has encouraged the development of behavioral finance theory, which aims to analyze psychological biases that have not been accommodated in traditional financial theory. Adequate financial literacy will be able to help investors to make better and rational decisions, but the existence of behavioral biases often makes decisions made by students tend to be irrational.

The existence of various factors that influence student investment decisions is sometimes not in accordance with financial theory. This study aims to be able to answer the research gap from previous studies related to the influence of financial literacy variables, sociodemographic factors, overconfidence bias, representativeness bias, risk tolerance, and service quality of investment galleries on investment decisions of Denpasar City students on the Indonesia Stock Exchange.

LITERATURE REVIEW

Behavioral Finance Theory

The Behavioral Finance approach sees that financial theory is not only based on classical or neoclassical assumptions but also includes emotional and psychological aspects that underlie decision making. According to Ricciardi and Simon (2000:2) behavioral finance is defined as follows: "Behavioral finance attempts to explain and increase understanding of the reasoning patterns of investors, including the emotional processes involved and the degree to which they influence the decision-making process". Behavioral finance tries to explain and increase understanding of the patterns of investor reasoning including the emotional aspect and the degree to which these aspects influence the decision-making process. More specifically, behavioral finance tries to provide answers to the what, why, and how of finance and investment from a human point of view.

Investation Decision

Wulandari and Iramani (2014) state that an investment decision is an action or policy taken in investing in one or more assets to generate profitable returns in the future. Investment decisions are a job that must be done carefully for stock investors because of the high element of uncertainty when entering the capital market. Reducing the level of losses and minimizing risk is a demand from decision makers (investors) in determining investment choices. Investment decisions made by students as investors in the capital market are influenced by various factors, including financial literacy, sociodemographic factors including gender and age, behavioral biases including overconfidence bias and representativeness bias, risk tolerance and investment gallery service quality factors can also influence student investment decisions. There are 5 (five) stages that must be considered in making an investment decision, namely: Determining investment objectives, determining investment policies, selecting portfolio strategies, selecting assets, and measuring and evaluating portfolio performance. There are 3 (three) basic things that can be used as indicators to measure investment decisions, which include: (1) Return, which is the main reason someone makes an investment; (2) Risk, where the greater the level of return expected from an investment, the higher the risk; (3) The relationship between the level of return and risk is expected to be linear / unidirectional (Tandelilin, 2019:9).

Financial Literacy

The Financial Services Authority (2017), defines financial literacy as knowledge, skills, and beliefs that influence attitudes and behavior to improve the quality of decision making and financial management in order to achieve prosperity. Each individual has different financial knowledge from one another so that financial literacy is one of the factors that can influence investment decision making in the capital market. Adequate financial literacy will be able to help investors to make better and rational decisions. Referring to previous research conducted by Putri and Hikmah (2020), in this study 4 (four) indicators will be used to measure the level of student financial literacy, namely: (1) Basic Financial Concept; (2) Savings and Borrowing; (3) Insurance; dan (4) Investment.

Sociodemography

Sociodemography is a science that studies the population (an area) especially regarding the number, structure (population composition) and its development (changes) from time to time (Aminatuzzahra, 2014:71). Demographic factors are factors that are inherent in a person and distinguish one individual from another. The influence of investor demographic factors should also be considered in making investment decisions, because an investment process often involves more than one individual. The current demographic development is not only studied purely, but also studied more broadly with non-demographic variables such as social, economic, environmental, cultural and political (Adioetomo & Samosir, 2010:5). According to Adioetomo and Samosir (2010:22), the most important demographic characteristics are gender and age. The dimensions of sociodemographic factors used in this study were age and gender. Gender is defined as the biological differences in humans known as men and women. In the economic aspect, men and women have differences in decision making (Rizkiana & Kartini, 2017). Age is a limit or level of life size that affects a person's physical condition. As a person grows older, a person has sufficient knowledge and experience when making decisions, so that an investor who is of a mature age makes more investment decisions based on logic. A person's socio-demographic level can encourage someone to invest because the better the socio-demographic, the better the individual's financial investment behavior.

Overconfidence Bias

Overconfidence is a condition where an investor tends to be too confident in his capabilities and understanding in making decisions (Afriani & Halmawati, 2019). Overconfidence will make investors overestimate in evaluating investments and underestimate the risks of investment. The higher the overconfidence of investors, the more ambitious they will be in investing (Novianggie & Asandimitra, 2019). Referring to previous research conducted by Khan et al (2016), the indicators in this study to measure student overconfidence bias are: (1) Have confidence in the success of a plan; (2) Able to predict the right stock; (3) Able to identify stocks that will win in the future; (4) Having investment performance above the average of other investors; (5) have investment skills above other investors; (6) Have a better investment experience than the average investor; and (7) have knowledge of investment above other investors.

Representativeness Bias

Ross et al (2016) stated that representativeness bias is the dependence on stereotypes, analogies, or limited samples to form an overall opinion of a group. Investors who experience representativeness bias will make an investment decision based on past experience and according to their mental picture. In essence, investors tend to look at past price trends as a guide for making investment decisions. When the past price trend increases, investors will believe that the stock is good, and vice versa. According to Ackert and Deaves (2010:142), the assumption caused by this factor is that most investors think that good companies are good investments. Referring to previous research conducted by Pompian (2006), the indicators used in this study to measure student representativeness bias are: (1) Investors only view based on something objective or from the outside; (2)

Investors make decisions based on potential success; (3) Investors tend to make quick and stereotyped investment decisions; and (4) Investors make decisions based on the past and are carried out in the present and the future.

Risk Tolerance

Risk tolerance is the level of ability that investors can accept in taking an investment risk. The level of a person's risk tolerance is strongly influenced by several factors, such as age, gender, income, experience, and income on investment (Wulandari and Iramani, 2014). A high risk tolerance makes a person tend to take bolder decisions compared to people with a low level of risk tolerance (Budiarto and Susanti, 2017). Referring to previous research conducted by Pak and Mahmood (2015) the indicators used to measure the level of risk tolerance of students in this study are: (1) The risk-taking behavior of each individual; (2) Aggressive; and (3) Conservative.

Investment Gallery Service Quality

The existence of an investment gallery in a university is part of the function of the Indonesia Stock Exchange in educating students about investing in the capital market. Satisfaction and dissatisfaction depend on the expectations and reality of investors for the services of an investment gallery. If the reality is more than expected, then the service can be said to be of good quality, whereas if the reality is less than expected then the service is said to be of poor quality. Referring to previous research conducted by Novita and Christin (2016), in this study, 20 indicators were used to measure service quality in investment galleries, namely: (1) Strategic location; (2) Adequate computer facilities; (3) Fast internet/wi-fi access; (4) neat appearance of the staff; (5) clean waiting room; (6) simple and hassle-free registration procedures; (7) timely service; (8) conformity of the service as promised; (9) the ability to handle investor requests (eg requests for financial data); (10) investment gallery staff have adequate knowledge; (11) speed in handling complaints; (12) Can meet the special requests of consumers (students); (13) clarity of information provided; (14) easy access to information; (15) security in transactions; (16) services are performed according to procedures; (17) affordable initial investment costs; (18) Fairness in providing services; (19) hospitality from investment gallery staff; and (20) Special services for the latest information on trading.

Based on the studies that have been disclosed above, the hypotheses in this study are:
H₁: Financial literacy variable have a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange through investment gallery.

H₂: Sociodemographic variable have a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange through investment gallery.

H₃: The overconfidence bias variable have a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange through investment gallery.

H₄: The representativeness bias variable have a positive effect on the investment decisions of Denpasar City students on the Indonesia Stock Exchange through the investment gallery.

H₅: The risk tolerance variable have a positive effect on the investment decisions of Denpasar City students on the Indonesia Stock Exchange through the investment gallery.

H₆: The service quality variable of the investment gallery have a positive effect on the investment decisions of Denpasar City students on the Indonesia Stock Exchange through the investment gallery.

METHODS OF RESEARCH

The population in this study were students who were registered as investors in investment galleries for the 2019 – 2020 period at 6 universities in Denpasar City, namely the Bali College of Information Management and Computer Engineering (STIKOM - Sekolah Tinggi Manajemen Informatika dan Teknik Komputer); Mahasaraswati University Denpasar; National Education University (UNDIKNAS - Universitas Pendidikan Nasional); Warmadewa University; Udayana University; and Ngurah Rai University. The sampling technique in this

study used the purposive sampling technique. *Purposive Sampling is a sample collection technique using the criteria selected by the researcher.* The number of samples used as a reference by researchers in this study was 90 respondents. The data collection technique in this study was a survey method with a questionnaire as a tool. The measuring instrument in this study is a Likert scale with an interval of 1-5. The study data will be analyzed and processed using multiple linear regression analysis techniques.

RESULTS AND DISCUSSION

Validity and reliability tests have been carried out on the research instrument, namely the questionnaire used in the study and the results of all the data in the study were declared valid and reliable. Based on the classical assumption testing that has been carried out on whether there is a violation of residual assumptions, including normality test, multicollinearity test, and heteroscedasticity test, the results show that none of the assumptions are violated. The multiple regression model proposed in this study was found to contain no biased data and meet the BULE (Best Linear Unbiased Estimator) assumption.

Table 1 - F Test Results (Simultaneous Test)

ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	620.615	7	88.659	8.123	.000 ^b
Residual	894.985	82	10.914		
Total	1515.600	89			

a. Predictors (Constant), financial literacy, gender, age, overconfidence bias, representativeness bias, risk tolerance, investment gallery service quality.

b. Dependent Variable: Investment decision

Source: Data processed, 2021.

Based on the results of the F test (simultaneous test) in table 2 shows that the F value is 8.123 with a significance of 0.000. The F-count significance value is less than 0.05 then the decision H0 is rejected, so it can be said that there is an effects of financial literacy variables, sociodemographic factors, overconfidence bias, representativeness bias, risk tolerance, and service quality of investment galleries simultaneously on student investment decision variables on the Indonesia Stock Exchange.

Table 2 – Multiple Linear Regression Analysis Results

Model	Coefficients ^a		Standardized Coefficients Beta	t	Sig.
	Unstandardized Coefficients				
	B	Std. Error			
1 (Constant)	10.126	4.325		2.341	.022
X ₁	.119	.167	.078	.713	.008
Gender	1.185	.759	.138	1.561	.022
Age	.065	.364	.016	.178	.041
X ₃	.076	.109	.073	.692	.001
X ₄	.295	.108	.284	2.722	.008
X ₅	.375	.175	.234	2.142	.035
X ₆	.142	.059	.241	2.413	.018

a. Dependent variable: Investment decision.

Source: Data processed, 2021.

From table 2 then the regression equation is obtained as follows:

$$Y = 10,126 + 0.119X_1 + 1,185X_2 + 0,065X_3 + 0,076X_4 + 0,295X_5 + 0,142X_6$$

Based on the results of the t-test (partial test) in table 2, it shows that the t_{count} value for each independent variable has a higher value than t_{table} with a significance level greater

than 0.05, thus showing a positive and significant effects of each independent variable, namely financial literacy, sociodemographic factors consisting of age and gender, overconfidence bias, representativeness bias, risk tolerance and service quality of investment galleries on student investment decisions on the Indonesia Stock Exchange through investment galleries.

Table 3 – Coefficient of Determination Test Results (R^2)

Model	R	R Square	Adjusted R Square	Std.error of the estimate
1	.640 ^a	.409	.359	3.30370

Source: Data processed, 2021.

The coefficient of determination test in this study aims to determine the percentage contribution of the effects of the independent variable on the dependent variable. The value of R Square is 0.409, which means that 40.9 percent of the variation in student investment decisions on the Indonesia Stock Exchange is effected by financial literacy variables, sociodemographic factors, overconfidence bias, representativeness bias, risk tolerance and service quality of investment galleries while the remaining 59.1 percent is effected by other factors not included in the research model.

Table 4 – Gender Difference Test Results (Mann Whitney)

	Gender	N	Mean Rank	Sum Of Ranks
Investation Decision	Male	32	53.42	1709.50
	Female	58	41.13	2385.50
	Total	90		

Source: Data processed, 2021.

Table 5 – Statistics on the Results of the Gender Difference Test (Mann Whitney)

Test Statistics ^a	
Investation Decision	
Mann – Whitney U	674.500
Wilcoxon W	2385.500
Z	-2.147
Asymp.Sig. (2 – tailed)	.032

a. Grouping variable: Gender

Source: Data processed, 2021.

Table 6 – Age Difference Test Results (Mann Whitney)

	Age	N	Mean Rank	Sum Of Rank
Investation Decision	18 – 19 years old	19	28.47	541.00
	20 – 21 years old	34	26.18	890.00
	22 – 23 years old	22	18.23	401.00
	24 – 25 years old	15	20.13	302.00
Total		90		

Source: Data processed, 2021.

Table 7 - Statistics Results of the Age Difference Test (Mann Whitney)

Test Statistics ^a	
Investation Decision	
Mann – Whitney U	148.000
Wilcoxon W	401.000
Z	-.530
Asymp.Sig. (2 – tailed)	.596

a. Grouping variable: Age

Source: Data processed, 2021.

The different test (mann whitney) in this study was conducted to see the differences between male and female gender and age on student investment decisions. In Table 4 it can

be seen that the average value of gender between male and female on student investment decisions on the Indonesia Stock Exchange is different. The average score for female is 41.13. This value is smaller than the average score for male, which is 53.42. In table 5, it can be seen that the significance value is 0.032, which means it is smaller than 0.05, so it can be said that there is a significant difference in gender between male and female on student investment decisions on the Indonesia Stock Exchange. Based on the results of the average value in this study, it is known that male students have greater investment decisions than female students on the Indonesia Stock Exchange. Furthermore, based on table 6, it can be seen that the average age of student's investment decisions on the Indonesia Stock Exchange is different. In table 7, the significance value is 0.596, which is greater than 0.05, so it can be said that there is no significant difference in the age variable on student investment decisions on the Indonesia Stock Exchange. Based on the results of the average value related to student investment decisions on the Indonesia Stock Exchange, the age range between 18 -19 years has the highest average of 28.47.

The level of student financial literacy has a direct relationship with student investment decisions or in other words the better financial literacy students have, the better investment decisions made by students. Financial literacy is closely related to individual financial management which includes investment decisions, funding, and good asset management. When an investor, including a student, has an adequate understanding of financial literacy, the investor will tend to use financial publications in making investment decisions, However, investors who have inadequate literacy are more likely to rely on advice from friends, family, etc. when making investment decisions. Behavioral finance theory which explains that in making investment decisions students can also be effected by psychological and emotional factors so that decisions made still contain behavioral bias. Through adequate financial literacy, the effects of behavioral bias in investment decision making can be minimized, so that investment decisions are made more based on analysis of financial information. Seeing this, it is known that financial literacy plays an important role when students are going to invest. The results of this study are in accordance with the results of research conducted by Putri and Halmawati (2020) which revealed that a person's financial literacy will affect how people save, borrow, invest, and manage their personal finances. Research conducted by Putri and Rahyuda (2017) also states that the level of financial literacy is important because it allows individuals to make an investment.

Sociodemographic factors of students consisting of gender and age can effects investment decisions made. The demographic characteristics of investors have a positive relationship with investor behavior and the type of investment chosen. When making investment decisions, male and female will have different results because of the different characteristics between male and female. Male and female have different special conditions, both in terms of physical, biological and psychological. These differences are the source of differences in functions, roles, and responsibilities in personal, family, and community life. Male are able to make better decisions than women. Female investors tend to be less confident in investing. Female pay more attention to many things and have less tolerance for risk while male investors are more focused on investment goals and returns and have a higher level of confidence to invest and have a high level of tolerance for risk. The high level of self-confidence of male investors indicates that in making investment decisions it can be effected by psychological and emotional factors. Male students as investors will prefer to invest in investment instruments that have high risks such as investing in stocks. The existence of the role of men as heads of families who are responsible for providing for their families makes investment an important thing to do at a productive age. A person's age can affect the investment decisions they makes. When someone is in productive age, that person will think more about investing by buying assets for their future when they are no longer productive. As a person gets older, his tolerance for risk will also decrease so that he will be more careful in making investment decisions. This result is supported by research conducted by Akims & Jagongo (2017) which states that age has an effects on investment decisions.

The effects of Overconfidence bias has a unidirectional relationship with student investment decisions or in other words, if Overconfidence bias is high, investment decisions

will tend to increase. The overconfidence behavior of an investor affects investment decisions, where the higher the overconfidence, the investors will tend to be more confident in placing their funds in an investment even though the investment is classified as an investment that has a high risk. When making an investment, an investor not only considers the prospects, returns or risks that will be received from an investment but is also still effected by psychological factors that greatly determine investment decisions, so that investment decisions can be made irrational. Overconfidence bias makes investors have excessive confidence when predicting the future so that it will affect the investment decisions made. Errors that can arise if an investor, including a student, makes investment decisions based on overconfidence bias, the student will trade excessively because he believes he has adequate skills even though he doesn't actually have it. In addition, students also overestimate their investment returns, on the contrary, underestimate risk, so they do not analyze the possible losses that arise from the investment decisions taken. The effect of overconfidence bias in making investment decisions also makes students not diversify their stock portfolios. These results are in accordance with several studies that have been carried out by Putri and Hikmah (2020); Addinpojoartanto and Surya (2020); Dewi and Krisnawati (2020); Ady and Hidayat (2019); Nadya and Lutfi (2018), Pradikasari and Yuyun (2018); and research conducted by Budiarto and Susanti (2017).

There is a unidirectional relationship between Representativeness bias and student investment decisions, meaning that if the representativeness bias is high, investment decisions will tend to increase. The results showed that the majority of student investors in 6 (six) universities in Denpasar City tended to be exposed to the representativeness bias. Representativeness bias is a financial behavior bias for decision making that only relies on past experience which is considered capable of representing or guiding current investment decisions. As a result of this representativeness bias, students in making investment decisions remain based on past experiences that are in accordance with their mental picture, so that a variety of new financial information that shows the true state of a company's stock is less attention, so that students can wrongly determine which shares to buy or sell and of course this will cause losses. The results of this study are in accordance with research conducted by Loris and Jayanto (2021); and Putri and Halmawati (2020).

There is a unidirectional relationship between the risk tolerance variable and student investment decisions, which means that the higher the risk tolerance, the investment decisions taken will also tend to increase. The level of risk tolerance of each individual will be different from one another. The choice of type of investment and the amount of funds to be invested are effected by the high and low risk tolerance of an investor. The higher the level of risk tolerance that an investor has, the higher the tendency of investors to invest in risky assets, one of which is by investing in the capital market. The high and low level of student risk tolerance can be effected by sociodemographic factors such as age, gender, wealth, experience and income on investment. The results of this study are in accordance with research conducted by Dewi and Krisnawati (2020), Putri and Hikmah (2020), Ady and Hidayat (2019) and research conducted by Pak and Mahmood (2015).

There is a unidirectional relationship between the service quality variable of the investment gallery and student investment decisions, which means that the better the service quality of the investment gallery, the student's investment decisions tend to increase. The increasing decision of students to invest in the capital market is driven by the high quality of services provided by the investment gallery to various elements in the investment gallery, starting from HR services and supporting facilities. Service quality can be determined by comparing student perceptions of services from investment galleries that are actually received/obtained by students with the services students actually expect on service attributes from investment galleries. If the service received or perceived is as expected, the service quality is perceived to be good, otherwise if the service received is lower than expected, the service quality is perceived to be poor. Different views on service quality often effects one's investment decisions. The results of this study are in accordance with research conducted by Novita and Christin (2016).

Implications

The results of this study are able to enrich the concept of variables that can affect investment decisions in accordance with those proposed by several previous researchers and support empirical studies related to financial management knowledge that affect student investment decisions on the IDX. The results of this study theoretically also support behavioral finance theory which explains that students in making investment decisions are still influenced by psychological and emotional factors that cause bias in investment decisions made, so investment decisions tend to be irrational. The results of this study are practically used as a reference for students in making decisions to invest in the capital market. Students in investing need to consider various factors that can influence their investment decisions so that they can avoid mistakes in making investment decisions. The existence of psychological and emotional factors that cause various biases also needs to be analyzed in addition to analyzing the company's financial data, so that students as investors are able to make investment decisions that will provide the maximum level of return with the lowest level of risk. Other practical implications can also be used as a reference for investment galleries to increase the number of investors, so it is necessary to increase the performance and quality of gallery services to students.

Limitations

The relatively short observation period was only in the 2019-2020 period, during which it was known that the pandemic had not ended, so the data obtained was not optimal to show the development of the number of students investing in the capital market during the covid-19 pandemic. This study only uses behavioral finance theory. It is hoped that further research can use other theories related to investment decision making. This study only focuses on investment galleries at 6 (six) universities in Denpasar City, so it cannot describe the overall activities of students who invest in the Indonesia Stock Exchange through investment galleries in Denpasar City. It is hoped that further research can use all investment galleries in Denpasar City so that it can provide a better picture of student investment decision activities and the factors that influence it. The results of this study cannot be generalized to other cases outside the object of research.

CONCLUSION

Financial literacy has a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange. This means that the higher the level of student financial literacy, the better investment decisions will be taken. An adequate level of financial literacy can help students avoid financial problems, especially those that occur due to financial mismanagement. In addition, with the higher level of financial literacy possessed by a student, it will be wiser in deciding an investment in the capital market. The higher the level of student financial literacy, the more rational investment decisions are made because they are based on financial analysis.

Sociodemographic factors consisting of gender and age has a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange. There are significant differences between female and male students in making investment decisions on the Indonesia Stock Exchange, it can be seen that male students are able to make higher decisions than female students. Male investors are more focused on investment goals and returns. In addition, male investors also have a higher level of confidence to invest and have a high level of risk tolerance so that male investors will prefer to invest in investment instruments that have high risks such as investing in stocks. A young and productive age supported by adequate financial knowledge from college makes students tend to have the desire to try investing in the capital market with the aim of getting returns and improving their welfare when they are old and not productive anymore.

Overconfidence bias has a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange. The higher the level of overconfidence bias that students have, the higher the investment decisions made by students, so that the potential

for errors caused is also higher. A student in making investment decisions is expected not to feel too confident by only relying on instinct, even though he has adequate knowledge but also requires adequate financial information as a basis for making investment decisions, so that investment decisions can be made more rational. The effect of overconfidence bias on investment decision making can be reduced by increasing financial literacy and increasing investment experience in the capital market.

Representativeness bias has a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange. The higher the level of student representativeness bias, the higher the potential for errors in making investment decisions. When students make investment decisions, they often assume that past good stock performance will continue in the future. Their assessment of information about stock prices is not analyzed in depth so that students make mistakes in deciding an investment. That is, when a student receives information related to stock prices and the stock price is in accordance with the expected expectations, the student will immediately buy it. Such behavior makes students tend not to think long in analyzing information related to stock prices, so they can make mistakes in deciding an investment.

Risk tolerance has a positive effect on investment decisions of Denpasar City students on the Indonesia Stock Exchange. The higher the level of risk tolerance of a student, the higher the investment decisions they makes on the Indonesia Stock Exchange. These results indicate that students tend to have a high tolerance for risk (risk takers) so that many make investment decisions in the capital market to get high returns.

The service quality of the investment gallery has a positive effect on the investment decisions of Denpasar City students on the Indonesia Stock Exchange. The higher the service quality of the investment gallery, the higher the student's investment decision on the Indonesia Stock Exchange. These results indicate that investment galleries have an effects in increasing the number of investors in the capital market through better quality services so that they can effects investment decisions made by students. Improving the quality of services provided to students is able to improve student investment decisions to invest in the capital market. There are 5 (five) dimensions of service quality that investment galleries must continue to pay attention to in order to continue to attract students to invest in the capital market, which include: Tangibles (physical evidence), Reliability, Responsiveness (sensitivity), Assurance (guarantee) and Empathy. With the fulfillment of these 5 dimensions, each part of the investment gallery has an important role in supporting the creation of optimal service performance in order to achieve the objectives of the establishment of this investment gallery.

REFERENCES

1. Ady, S. U., dan Hidayat, A. (2019). Do Young Surabaya ' s Investors Make Rational Investment Decisions ? *International Journal of Scientific & Technology Research*, 8(07), 319–322.
2. Addinpujoartanto & surya.2020.PengaruhOverconfidence, Regret Aversion, Loss Aversion, dan Herding BiasTerhadap Keputusan Investasi di Indonesia. *Jurnal Riset Ekonomi dan Bisnis*.13(3):175-187.
3. Akims, M. A., & Jagongo, A. (2017). Financial Literacy and Its Impact on Investment Decisions in Nigeria: a Theoretical Perspective. *International Journal of Scientific Research and Innovative Technology*, 4(11), 18–24.
4. Aminatuzzahra. 2014. Persepsi Pengaruh Pengetahuan Keuangan, Sikap Keuangan, Sosial Demografi Terhadap Perilaku Keuangan dalam Pengambilan Keputusan Investasi Individu. *Journal Financial Behavior*, July 2014.
5. Antony, A., & Joseph, A. I. (2017). Influence of Behavioural Factors Affecting Investment Decision - An AHP Analysis. *Metamorphosis: A Journal of Management Research*. 16 (2), 107 - 114. <https://doi.org/10.1177/0972622517738833>.
6. Ariani, Sofi et al. 2016.Pengaruh Literasi Keuangan, Locus Of Control, dan Etnis Terhadap Pengambilan Keputusan Investasi. *Journal of Business and Banking* 5(2):

257–70.

7. Arifin, Z., dan Soleha, E. 2019. Overconfidence, Attitude Toward Risk, And Financial Literacy: A Case In Indonesia Stock Exchange. *Review of Integrative Business and Economics Research*, 8(4), 144–152.
8. Aren, S., & Zengin, A. N. 2016. Influence Of Financial Literacy And Risk Perception On Choice Of Investment. *Procedia - Social and Behavioral Sciences* 235 (October):656–63.
9. Ateş, S., Coşkun, A., Şahin, M. A. & Demircan, M. L., 2016. Impact of Financial Literacy on the Behavioral Biases of Individual Stock Investors: Evidence from Borsa Istanbul. *Business and Economics Research Journal*, 7(3), pp. 1-19.
10. Bali.bisnis.com. Milenial Dominasi Jumlah Investor Pasar Modal di Bali. <https://bali.bisnis.com/read/20210204/538/1352236/milenial-dominasi-jumlah-investor-pasar-modal-di-bali>
11. Balipost.com. Jumlah Investor di Bali Naik 1.000 Sebulan di tengah Pandemi Covid-19. <https://www.balipost.com/news/2020/06/12/129224/Jumlah-Investor-di-Bali-Naik.html>
12. Baker, H.K., Kumar, S., Goyal, N., & Gaur, V. 2019. How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*, 45(1), 124-146.
13. Budiarto, A. 2017. Pengaruh financial literacy, overconfidence, regret aversion bias, dan risk tolerance terhadap keputusan investasi (Studi pada investor PT. Sucorinvest Central Gani Galeri Investasi BEI Universitas Negeri Surabaya). *Jurnal Ilmu Manajemen (JIM)*, 5(2).
14. Candy & Kellen Vincent. 2021. Analisis Pengaruh Behavioural Finance Terhadap Pengambilan Keputusan Investasi di Kepulauan Riau. *Jurnal Ekonomi & Ekonomi Syariah* 4(2):864-873.
15. Dewi dan Krisnawati. 2020. Pengaruh financial literacy, risk tolerance dan overconfidence terhadap pengambilan keputusan investasi pada usia produktif di Kota Bandung. *Jurnal Mitra Manajemen Online*. URL: <http://jurnalmitramanajemen.com>. 4(2):236-250.
16. Filip, Mihai Toma. 2015. Behavioral biases of the investment decisions of Romanian investor on the Bucharest stock exchange. *Procedia economics and finance*. 32:200-207.
17. Ghozali, I. 2016. Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23. Edisi 8. Semarang: Badan Penerbit Universitas Diponegoro.
18. Halim, Abdul. 2019. Analisis Investasi, Edisi kedua, Jakarta: Salemba Empat.
19. Indonesian Stock Exchange. 2021. Daftar lokasi galeri investasi, kantor perwakilan, dan anggota bursa. <https://rdis.idx.co.id/id/invest-galleries>.
20. Indonesia Stock Exchange. 2021. Pedoman galeri investasi BEI. https://www.idx.co.id/Portals/0/StaticData/AboutUs/IDXProgram/ID_XCorner/Pedoman-Galeri-Investasi-BEI-2013_version2-0.pdf
21. Jogiyanto. 2017. Teori Portofolio dan Analisis Investasi. Edisi Kesebelas.
22. Yogyakarta. PT. BPFY Yogyakarta.
23. Khan, A. R., Azeem, M., & Sarwar, S. (2017). Impact of Overconfidence and Loss Aversion Biases on Investment Decision: Moderating Role of Risk Perception. *International Journal of Transformation in Accounting, Auditing, & Taxation*, 1(1).
24. Kartini, dan Nugraha, Nuris Firmansyah. 2015. Pengaruh Illusions of Control, Overconfidence, dan Emotion terhadap Pengambilan Keputusan Investasi Pada Investor Di Yogyakarta. *Journal inovasi dan kewirausahaan*. 4(2).
25. Kapoor, S. & Prosad, Jaya M. 2017. Behavioral Finance: A Review. *Procedia*. 5th International Conference on Information Technology and Quantitative Management.
26. Kumar, S. & Goyal, N., 2016. Evidence on rationality and behavioural biases in investment decision making. *Qualitative Research in Financial Markets*, Volume 8, p. 270-287.
27. Luong, L.P & Doan Thi Thu Ha. 2011. Behavioral Factors Influencing Individual Investors' Decision – Making And Performance, A Survey at The Ho Chi Minh Stock Exchange. Tesis. Umea University.
28. Lusardi, A., Mitchell, O. S., & Curto, V. 2010. Financial literacy among the young. *The Journal of Consumer Affairs*, 44(2), 358-380. <http://dx.doi.org/10.1111/j.1745-6606.2010.01173.x>.

29. Lusardi, A. & Mitchell, O. (2011). Financial Literacy around the World: An Overview. *Journal of Pension Economics and Finance: University of Pennslvania.* (online)(<https://doi.org/10.1017/S1474747211000448>) pp 497-509.
30. Loris & Jayanto.2021.The Effect Of Representativenees, Availability,Anchoring, Risk Perception, And Herding On Investment Decisions Syariah Investors. *Jurnal Akuntansi.*11(1):81-92.
31. Mishra, K. & Metilda, M. J., 2015. A study on the impact of investment experience, gender, and level of education on overconfidence and self- attribution bias. *IIMB Management Review*, Volume 27, p. 228–239.
32. Munawar,dkk.2019.Persepsi mahasiswa atas galeri investasi perguruan tinggi dan pengaruhnya terhadap minat berinvestasi.Jurnal analisis sistem pendidikan tinggi.3(2):89-96.
33. Nusa Bali. com. Investor Pasar Modal Bali Melonjak. Diambil (<https://www.nusabali.com/berita/83048/investor-pasar-modal-di-bali-melonjak>)
34. Nofsinger, John R. (2001); *Investment Madness: How Psychology Affects Your Investing and What to Do About It*; Prentice Hall.
35. Novita & Christin.2016.Kualitas layanan pada galeri investasi Universitas Bunda Mulia dengan menggunakan metode Servqual.*Business Management Journal.*12(1):91-113.
36. Novianggie,V.,&Asandimitra,N.2019. The Influence Of Behavioral Bias, Cognitive Bias, and Emotional Bias On Investment Decision For College Students With Financial Literacy as The Moderating Variable. *International Journal Of Academic Research in Accounting, Finance and Management Sciences*,9 (2),92-107.
37. Otoritas Jasa Keuangan. 2019. Pasar Modal, Pengelolaan Investasi. Diambil ([https://www.ojk.go.id/id/kanal/pasar-modal/Pages/Pengelolaan Investasi. aspx](https://www.ojk.go.id/id/kanal/pasar-modal/Pages/Pengelolaan%20Investasi.aspx)).
38. Pajar, R. C. (2017). Pengaruh Motivasi Investasi Dan Pengetahuan Investasi Terhadap Minat Investasi Di Pasar Modal Pada Mahasiswa Fe Uny.*Jurnal Profita*, 1(1), 1–16.
39. Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions: A study on potential investors of Kazakhstan. *International Journal of Commerce and Management*, 25(4), 370–384. <https://doi.org/10.1108/IJCoMA-01-2013-0002>.
40. Pompian, Michael, M, 2012.*Behavioral Finance and Wealth Management*.Edisi Kedua. New York: Jhon Wiley & Sons, Inc.
41. Putri dan Rahyuda. 2017. Pengaruh Tingkat Financial Literacy dan Faktor Sosiodemografi terhadap Perilaku Keputusan Investasi Individu.E- Jurnal Ekonomi dan Bisnis Universitas Udayana, 3407-3434.
42. Putri & Yuyun 2020.Faktor- faktor yang mempengaruhi keputusan Investasi pada investor saham di Surabaya.*Jurnal Ilmu Manajemen Fakultas Ekonomi Universitas Negeri Surabaya.*8 (1):,197-209.
43. Putri& Hikmah.2020.Pengaruh Financial Literacy, Overconfidence, Regert Aversion Bias, dan Risk Tolerance Terhadap Investment Decision di Kota Batam.*Jurnal Ilmiah Maksitek*.Vol.5 No.2.
44. Putri & Halmawati.2020.Pengaruh Financial Literacy, Representativeness bias, Dan Bias optimism terhadap pengambilan keputusan investasi.*Jurnal Eksplorasi Akuntansi.*2(3) Seri A:2976-2991.
45. Pradikasari, Ellen, dan Isbanah.2018.Pengaruh Financial Literacy, Illusion of Control, Overconfidence, Risk Tolerance, Dan Risk Perception Terhadap Keputusan Investasi Pada Mahasiswa Di Kota Surabaya.*Jurnal Ilmu Manajemen (JIM)* 6(4): 424–434.
46. Rafinza.2018.Pengaruh Financial Literacy, Cognitive bias, Emotional bias terhadap keputusan investasi (Studi pada Investor Galeri Investasi Universitas Negeri Surabaya).*Jurnal Ilmu Manajemen.*6(3) 108 -117.
47. Selim, Asiye Nur.2016. Influence Of Financial Literacy and Risk Perception on Choce of Investment.*Procedia-social and behavioral sciences* 235(2016).656-663.
48. Sugiyono. 2015. *Metode Penelitian Kuantitatif, Kualitatif, dan R &D*. Bandung: Alfabeta.
49. Sugiyono. 2018. *Metode Penelitian Kuantitatif, Kualitatif, dan R &D*. Bandung: Alfabeta.
50. Sukamulja, S. 2017. *Pengantar Pemodelan Keuangan dan Analisis Pasar Modal*.

51. Ed I. Yogyakarta: Andi.
52. Sukamulja, Sukmawati, and Senoputri. 2019. Regret Aversion Bias, Mental Accounting, Overconfidence, and Risk Perception in Investment Decision Making on Generation Y Workers in Yogyakarta. *International Journal of Economics and Management Studies* 6(7): 102–10.
53. Tandellilin, Eduardus. 2010. *Portofolio dan investasi teori dan aplikasi*. Yogyakarta: BPFE – Yogyakarta.
54. Tandellilin, Eduardus. 2017. *Pasar Modal: Manajemen Portofolio dan Investasi*. Yogyakarta: Kanisius.
55. Tekc, e, B., Yilmaz, N. & Bildik, R., 2016. What factors affect behavioral biases? Evidence from Turkish individual stock investors. *Research in International Business and Finance*, Volume 37, p. 515–526.
56. Ullah, S., 2015. An Empirical Study of Illusion of Control and Self-Serving Attribution Bias, Impact on Investor's Decision Making: Moderating Role of Financial Literacy. *Research Journal of Finance and Accounting*, 6(19), pp. 109-118.
57. Vuthalova, Melisa. 2015. Pengaruh pengalaman berinvestasi terhadap literasi keuangan dan keputusan investasi. *Jurnal online Universitas Pertanian Bogor*. <http://repository.ipb.ac.id>.
58. Vitmiasih, dkk. 2021. Pengambilan Keputusan Investasi Rasional: Suatu tinjauan dari dampak perilaku Representativeness bias dan Hearing effect. *Jurnal Akuntansi Terapan Indonesia*, 4(1):1-13.
59. Violeta, J., & Linawati, N. 2019. Pengaruh Anger Traits, Anxiety Traits, dan Faktor Demografi Terhadap Keputusan Investasi. *Jurnal Manajemen Pemasaran*, 13(2), 89-96.
60. Wardani, A. K., & Lutfi, L. 2017. Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business and Banking*, 6(2), 195-214.
61. Wahyudi, dkk. 2017. Pengaruh Service Quality galeri investasi dan motivasi investasi terhadap keputusan investasi mahasiswa FEB Unisma di Pasar Modal. *e-Jurnal Riset Manajemen Fakultas Ekonomi dan Bisnis Unisma*. www.fe.unisma.ac.id:120-133.
62. Wijyanthi, Isnawatie. 2015. Studi Deskriptif: Perilaku Investor Saham di Surabaya Berdasarkan Apek Psikologis, Demografis, dan Rasionalitas. *Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 4(2), 1-17.
63. Wirawan, et al. 2019. The Role Of Financial Literacy, Gender Education, and Ethnicity towards Investment Decisions. *6 th International Conference on Entrepreneurship (ICOEN) 2019*, pages 199-211.
64. Wulandari, Dewi Ayu & Rr Iramani. 2014. Studi Experienced Regret, Risk Tolerance, Overconfidence dan Risk Perception Pada Pengambilan Keputusan Investasi Dosen Ekonomi. *Journal of Business and Banking*, Volume 4, No. 1, May 2014, pages 55 – 66.