ATLANTIS PRESS
Advances in Economics, Business and Management Research, volume 192
Proceedings of the Seventh Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2021)

Investment Decisions: The Effect of Risk Perceptions and Risk Propensity for Beginner Investors in West Sumatra

Erly Mulyani[1], Halkadri Fitra[2], Fiola Finomia Honesty*[3]

[1,2,3]*Universitas Negeri Padang, Padang Indonesia*
Corresponding Author: fiola.honesty07@gmail.com

ABSTRACT

Investment decision is an activity carried out by the investor for investing their fund. For this reason, investors must consider many factors. Investor consider accounting information in investment decision. However, investor psychology, which is reflected by a personal signal, is more dominant in investment decision. Psychological factors will make investors hesitate in making investment decisions, because investors consider personal psychology compared to information from the public. This psychological phenomenon will result in the stock price may not reflecting its fair value. West Sumatra has 8 Investment Galleries, the largest number of which are located in Padang City which has 6 Investment Galleries. In the Investment Gallery, most investors are students. Students take irrational actions in making investment decisions. Student decisions are not always in accordance with financial theory, students have psychological factors (risk perception and risk propensity) in investment decisions making. So that the objects in this study are students. The purpose of this study was to examine and analyze: 1) the effect of risk perceptions on investment decisions; 2) the effect of risk propensity on investment decisions. This research is causative research. It seeks to explain the effect of risk perception (X_1), Problem and risk propensity (X_2) as an independent variable on investment decisions (Y) as the dependent variable. The method used in data collection is using primary data. Data collection are using a questionnaire. The population in this study were all beginner investors in West Sumatra. The sample criteria in this study are as follows: (1) the age of the respondent is at least 18 years old (2) all respondents have been or have become stock investors in West Sumatra. Determination of the number of samples in this study using the Slovin formula. The result showed that risk propensity had positive correlation to investment decisions, supporting previous studies on this two variables relationship.

Keywords: *Investment, investment decision, beginner investors, risk perceptions, risk propensity.*

1. INTRODUCTION

In the era of globalization, the capital market is seen as an effective means in encourage economic growth and national development. Currently, capital market has become an attractive investment destination for both domestic and foreign investors. If the interest of the investor in the capital market is higher, buying and selling activities in the capital market will be higher, which gives an indication that the business activities of many different companies are going well.

The investment decisions making is an activity carried out by investors in investing, so investors must consider many factors. In decisions making process, investors commonly consider accounting information. However, investors' psychological factors, for example personal signals, are more dominant. [1] Psychological factors will make investors hesitate in taking investment decisions, because investors consider personal psychology compared to information from the public. This psychological phenomenon will result in the stock price is not reflecting its fair value.

The number of investors in West Sumatra at of the end of November 2020 was 23,087 SID, up 5,586 SID compared to the end of 2019. This number represents the highest increase in the number of investors from year to year. Based on data from PT Kustodian Sentra Efek Indonesia

Copyright © 2021 The Authors. Published by Atlantis Press International B.V.
This is an open access article distributed under the CC BY-NC 4.0 license -http://creativecommons.org/licenses/by-nc/4.0/.

(KSEI), total equity transactions during November 2020 were 264,035 transactions with a transaction value of IDR 1.2 T (IDR 1,234,547,831,550). The development of the number of investors that is calculated based on the number of SIDs is not only nationally, but also based on the regional level.

The increasing number of individual investors cannot be separated from the existence of the Indonesia Stock Exchange (BEI), which collaborates with universities to establish BEI investment gallery, as the manager of securities trading in Indonesia, continues to carry out innovations to increase investment in the capital market, one of which activity named “Let's Save Stocks”. This program is an effort to invite the public, especially students, as beginner investors to invest in the capital market.

West Sumatra has 8 Investment Galleries, the largest number of which are in Padang City which has 6 Investment Galleries. Most of the investors in the Investment Galleries are students. Students often take irrational actions in investment decisions making. Student decisions are not always in accordance with financial theory, students have an attitude of risk perception and risk propensity in making investment decisions. So that the objects in this study are students.

In order to get a decent life, one way a person can do is by investing. Choosing the right investment will give high returns to investors. Investors will consider certain expected returns with certain risks. Which investment is chosen and which investment has a greater risk (risk averter) or ignores risk (risk indifference). Within a person there is a conflict between the will and desire obtained by rationality in the long run and emotional factors in the short term. Investors will exercise self-control and will implement it to make decisions that generate profits in the long term. Investors will consider decisions taken in exploration (Nofsinger, [2] where someone who engages in social interactions will learn more about investing from someone who does not often have social interactions. Perceptions will increase when the trend level decreases, so that it will affect the behavior of investment decisions [10].

Research on investor psychology factors in investment decisions making in the capital market has been widely carried out, but it has resulted in various conclusions, such as research conducted by Rosyidah [3] which found that risk perception does not affect investment decision making. Furthermore, based on research by Nyoman et al., [4] found risk perceptions has a positive effect on investment interest in the capital market. Furthermore, based on research by Lestari & Saw, [5] found there is no effect of risk to investment decision making. The diverse results of research on the behavior of investors and especially the research in West Sumatra is still rare, especially for beginner investors, the authors are interested to conduct a research entitled "Investment Decisions: The Effect of Risk Perceptions and Risk Propensity for Beginner Investors in West Sumatra”

2. LITERATURE REVIEW

Investment at present can be defined as an activity to place a certain number of funds or assets for a certain period with the aim to earn income or an increasing in investment value. Investors make an investment basically to get profit in the future [6].

One of the important factors in the financial function is investment decisions, that investment decisions determine the company value. In investment decision theory it is very important, because all activities in the financial sector always end in investment decisions. In this theory, individuals are assumed to be decision makers who behave rationally.

According to Law no. 25 of 2007 the meaning of investor is an individual or business entity which do investment, it can be in the form of domestic investment and foreign investment. Based on the nature, investors are divided into three categories, namely: Investors who like risk (risk seekers), Investors who are neutral to risk (risk neutrality), Investors who do not like risk (risk averter)

Financial theory can be defined as the application of psychology in the financial behavioral discipline. It is study how humans actually behave in a financial decision. Then according to Ritter [7] financial behavior is behavior based on psychology that will affect the decision process which consists of two parts, namely cognitive (the way humans think) and limit to arbitrage (utilizing inefficient markets).

Behavioral finance is a financial analysis that uses psychology and science with an approach that explains investors making investments with finances that are influenced by psychological factors. This theory intends to understand the behavior of investors in making investment decisions and acting in the capital market which will affect market performance. Sengupta, Prosad, & Kapoor [8] stated that behavioral finance is as

the branch of social psychology that explain the humanity side in decision making. According to Alquraan, Alqisie, & Shofa [9], behavioral finance seeks to discover how emotions and investor psychological influences investment decisions. In general, investors make common mistakes in their financial decisions because of their emotions. Alquran et al. [9] on his research states about the attitudes or behavior of the investors that can influence decisions investment is divided into four parts, namely over confidence, risk perception, loss averse, and herding.

Risk perception is certainly different for each investor. Risk perception is a subjective assessment of an investor who depends on each other's psychology individual. The role of risk perception in investor behavior is considered very important, especially in urgent and uncertain circumstances [3]. Based on research of Baghani & Sedaghat [10]; Kharta & Kumar [11] show that risk perception has an influence significant impact on investment decision making. However, the Qur'an et al. [9]; Rosyidah & Lestari [3] in his research found a results that there is no effect of risk perception on investment decision. The measurement of risk perception carried out using indicators from Ullah [12], that if investor being careful of sudden stock changes, worrying about investing in stocks with negative performance, being afraid to invest in stocks with definite profits, and afraid to invest in stocks with positive performance.

Risk propensity is a person's appraisal of a risky situation. The appraisal depends on the psychological condition and characteristics of the person Rosyidah & Lestari [2]. Then according to Wulandari & Iramani [13] risk perception is the point of view of investor of a risky situation which will be obtained when making an investment decision.

The theoretical prospect was first stated by Kahneman & Tversky [14]. This theory is a theory that discusses the return of decisions made by humans whose results are uncertain in a situation. In theory prospect asserts that individuals do not always act according to financial theory under risk and certainty, but rather individuals add erratic psychological and behavioral factors to rational choices.

In the capital market there is a diversity of investors in it. The existence of this diversity causes differences in the level of confidence (confidence) and expectations (expectations) on the risk and return of investment activities. This diversity has resulted in transactions. For that reason, it is important to understand behavioral finance.

Financial behavior is a model that point out some implications from the psychological factors which affect investors. In the investment decision making process, many financial theories assume investors will always behave rationally. The theory assume that investors are going to analyze and receive all information in rationally. But in reality, investors often do irrational behavior, so that this condition deviates from the rationally assumption and will be biased. Financial behavior aims to look at the emotional characteristics of investors. It is explained subjective factors and irrational anomalies in the capital market.

Rosyidah [2] found risk perceptions have no any effect to investment decision making. Furthermore, Nyoman [3] state that risk perceptions influence positively to the investment interest in capital market. While Lestari & Saw [4] found that risk perceptions have no effect to the investment decision making.

Based on the research of Dheeraj et al [15], it was found that there was a significant influence between risk propensity on investment decisions. Furthermore, based on research [16] it is known that the type of work and income make a difference in terms of an investor's risk propensity in making investment decisions. Furthermore, based on the research of Pradikasari & Isbanah [17] it was found that risk propensity has no significant influence to investment decisions.

Research Hypothesis

H_1 There is a significant positive relationship between risk perception and investment decision.

H_2 There is a significant positive relationship between risk propensity and investment decision.

3. METHOD

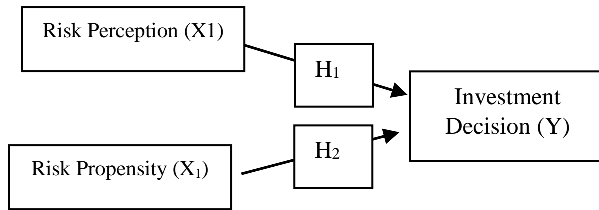
This research is a quantitative research. The method of the research is the causal (cause-effect) which aims to determine the causal relationship of a problem. After the type of research was identified, the next step is to determine the definition of the variable concept used in the research.

This research tries to find the causal relationship of risk perception (X1) and risk propensity (X2) to investment decisions.

All beginner investors in West Sumatra are the population in this study. The sampling technique in this research was purposive sampling. The criteria of the sample in this study are as follows: (1) the age of the respondent is at least 18 years old (2) all respondents have or have been stock investors in West Sumatra, totaling 30 new investors in West Sumatra. The number of samples in this study was determined based on the Slovin formula. In this study, the object of research is a beginner investor in West Sumatra in 2021.

The data used in this study is the primary data. The data is obtained directly by the researcher on the respondent by answering research questions that can be done through a survey by a questionnaire.

3.1 Research Model



3.2 Operational Definition of Research Variables

No	Variabel	Oparational Definitions	Indicators
1	Investment Decisions	The decision of beginner investors to invest in the capital or stock market by allocating funds into investment forms that will get benefits in the future (Strisno, 2012).	1. Return 2. Risk 3. Relation between return and risk
2	Risk Perceptions	The investor subjective judge ment about the characteristics and severity of a capital market risk	1. Investor gain benefit 2. Investor didn't gain benefit
3	Risk Propensity	The tendency of investors in facing a risk.	1. Taking Decisions 2. Stock buying 3. Risk of money lost

3.3. Data analysis technique

After the questionnaire is distributed to the respondent. Then the data began to be processed by tabulating and then processed using the SPSS program. First step to analyse the data the validity test, reliability test, and classical assumption test are conducted. After that multiple linear regression analysis are done.

4. RESULTS

4.1 Validity test

"Validity means the extent to which the accuracy of a measuring instrument in carrying out its measuring function..." (18). This means that there is a match between the measuring instrument and the measurement function and the target. According to Grondlund in Wahyuni et. al (19) "...validity leads to the right interpretation of the results, the use of an evaluation procedure in accordance with the objectives of the measurement. Validity is a condition when an evaluation instrument can measure what should be measured precisely."

According to Ghozali (20), the validity test is used to measure the validity of the questioners, to test whether the research questioners is valid or not.Sutawidjaya et.al (21) stated that an instrument is valid if its significance alpha (level of error) below 0.05. Based on the validity test and the result of the test, it can be interpreted that all questions are valid with total significance below 0.05.

4.2 Reliability test

Reliability concerns the accuracy of the measurement results. A measurement instruments have high reliability or can be trusted if the measuring instrument is steady. That is, the measuring instrument is stable, can be reliable and

predictable. The measuring instrument is said to be steady if the measuring instrument is in repeated measurements at the same object produces the same size. (22). Nunally (1994) in (23) stated a construct or variable is said to be reliable if it gives a Cronbach Alpha value > 0.7. The following table is the reliability test results of variables in this study.

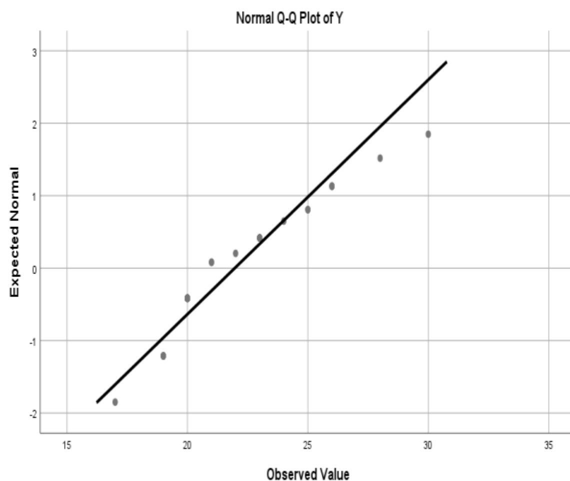
4.3 Reliability Statistics

Cronbach's Alpha	N of Items
.766	16

4.4 Normality test

Normality test aims to test whether both the model of variable regression and independent variable is normally distribution or not. The method to test the normality of the data is by using the P-P Plot Normal Graph. It can be done by looking at the distribution of the data. If on the graph, the data distribution follows a straight-line pattern, then the data is normal. If the normality test table using Kolmogorov Smirnov sig value > 0.05, then the data is normally distributed.

Based on the normal p-p plot graph, the data spread in a straight line or normal. Thus, the data is normally distributed and the regression model has met the assumption of normality



`

4.5 Correlation Coefficient Test and Coefficient of Determination

The multiple linear correlation coefficient is an index number that used to measure the close relationship between two variables. While the coefficient of determination has a function to explain the extent to which the ability of the independent variable (risk perception and risk propensity) to dependent variable (investment decisions).

Based on the analysis results using computer assistance program IBM SPSS Statistics 21 shows that the coefficient of determination towards Y (R^2) is 0.419. This shows that the risk propensity and risk perceptions variable have a contribution and effect on Investment Decisions in percentage of 41.19%. About 58.1% Y variable determined by other variables not examined by researcher

F test

The significance test aims to determine the significance of the variable Risk Propensity and Risk Perceptions to Investment Decisions. Hypothesis which tested which are Risk Propensity and Risk Perceptions have an effect on Investment Decisions. The significance test used the F test. The results show the F test obtained 9,743. When compared to 3.35 at the 5% significance level, it is greater than (9.471 > 3.11) or p (0.00 < 0.05) so that Risk Propensity and Risk Perceptions together have a significant influence on investment decisions.

T test

The significance test aims to determine the significance of the variable Risk propensity and risk perceptions to investment decisions. From the T test, the t value of the variable X_2 (Risk Propensity) is greater than the t table (2.0480) so that it can be said that the Risk Propensity effect the dependent variable while the variable X_1 (Risk Perception) has no effect on the dependent variable. Then the variable significance was found that the X_2 variable had a significance value below 0.005.

4.6 Multiple Linear Regression Test

Multiple regression model is applied to examine the effect of the independent variables namely risk propensity to investment decisions. The meaning of the numbers in the T test result table equation above is:

The constant value (a) is 0.711, meaning that if risk perceptions and risk propensity are considered

constant, the respondent's investment decision is worth 0.711. This positive value means that there are stock investors who continue to invest in the stock market in Indonesia.

The regression coefficient of the risk propensity variable is 0.400, which means that each increase in risk propensity of 1 will increase the investment decision in stock by 0.400

5. DISCUSSIONS

The results of hypothesis testing indicate that the risk propensity variable affects investment decisions. This result is consistent with the behavioral finance theory and previous research conducted by Ton and Dao (24). Ton and Dao (24) stated that psychological factors naturally exist in every human being and influence every decision, including investment decisions. Meanwhile, risk perception has no effect on investment decision making. The results of this study have different result with Nurul Badriyah (25), regarding the influence of individual characteristics, attitudes and perceptions on investor behavior. Even perception is the dominant variable. A person tends to define a risky situation when he experiences a loss as a result of a bad decision, especially if the loss has an impact on his financial situation. Cho and Lee (26) state that risk perception is a person's assessment of a risky situation, where its dependent on psychological characteristics and circumstances of the investor. The degree of uncertainty will be evaluated and assessed differently by different decision makers. In this study, the assessment of novice investors on risk perceptions is still high. Respondents tend to be afraid and need a lot of consideration in making investment decisions.

6. CONCLUSION

This study aims to see how far the influence of risk perception and risk propensity on investment decisions of beginners in the capital market. Based on the results of research findings and hypothesis testing that have been proposed, it can be concluded that risk propensity have a positive effect on investment decisions. Meanwhile, the perception of risk has no effect on investment decisions. In addition to psychological factors, beginner investors need many other considerations in making investment decisions.

ACKNOWLEDGMENT

The authors would like to thank Lembaga Penelitian dan Pengabdian Masyarakat Universitas Negeri Padang for funding this work with a contract number: 628/UN35.13/LT/2021.

REFERENCES

1. Puspitaningtyas, Zarah. (2013). *Relevansi Nilai Informasi Akuntansi dan Manfaatnya bagi Investor*. Jurnal Ekonomi dan Keuangan. Vol,16. No.2:164-183.
2. Nofsinger, John R (2005), *Psychology Of Investing*, Edisi Kedua, New Jersey: Preentice-Hall Inc.
3. Rosyidah, S. M., & Lestari, W. (2013). "*Religiusitas dan Persepsi Risiko dalam Pengambilan Keputusan Investasi pada Perspektif Gender*." Journal of Business and Banking 3 (2):189–200
4. Nyoman, N., Rahayu, S., Dewi, T., Fridagustina, K., Herry, G., & Asana, S. (2017). Modal Investasi Awal Dan Persepsi Risiko. *Jurnal Ilmiah Akuntansi*, *2*(2), 173–190.
5. Lestari, W., & Saw, M. (2013). Religiusitas Dan Persepsi Risiko Dalam Pengambilan Keputusan Investasi Pada Perspektif Gender. *Journal Of Business And Banking*, *3*(2), 189–200.
6. Jogiyanto, H.M. (2010). *Teori Portofolio dan Analisis Investasi.* Edisi Ketujuh. BPFE. Yogyakarta.
7. Ritter, J. R. (2003). Behavioral Finance. Pacific-Basin Finance Journal, 11 (4), 429-437.
8. Sengupta, J., Prosad, J. M., & Kapoor, S. (2015). Theory of Behavioral Finance. In *Research on Behavioral Finance and Investment Strategies: Decision Making in the Financial Industry* (pp. 98–101). United States of America: IGI Global book series Advances in Finance, Accounting, and Economics (AFAE).
9. Alquraan, T., Alqisie, A., & Shofa, A. Al. (2016). Do Behavioral Finance Factors Influence Stock Investment Decisions of Individual Investors? (Evidences from Saudi Stock Market). *American International Journal of Contemporary Research*, *6*(3), 159–169.
10. Baghani, M., & Sedaghat, P. (2016). Effect of Risk Perception and Risk Tolerance on Investors' Decision Making in Tehran Stock Exchange. *International Academic Journal of Accounting and Financial Management*, *3*(9), 45–53.
11. Kharta, S., & Kumar, S. R. (2014). Influence of Risk Perception of Investors on Investment

Decisions: An Empirical Analysis. *Journal of Finance and Bank Management*, *2*(2), 15–25. https://doi.org/10.5713/ajas.2001.258
12. 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. *Journal of Finance and Accounting*, *6*(19), 109–118.
13. Wulandari, D. A. & Rr Iramani, R. (2014). "Studi Experienced Regret, Risk Tolerance, Overconfidance dan Risk Perception Pada Pengambilan Keputusan Investasi Dosen Ekonomi." *journal of Business and Banking 4(1): 55-66*
14. Kahneman, D., & Tversky, A. (1979). "Prospect Theory: An Analysis of Decision Under Risk." *Journal of the Econometric Society* 47 (2):263–91
15. Dheeraj Sharma., Bruce L. Alford., Shahid N. Bhuian., dan Lou E. Pelton. 2009. "A Higher-Order Model of Risk Propensity". Journal of Business Research, 62: 741-744
16. Nurventiani, P., & Iramani, R. (2013). Persepsi Dan Kecenderungan Terhadap Risiko Investasi Berbasis Faktor Demografi.
17. Pradikasari, E., & Isbanah, Y. (2018). Pengaruh Financial Literacy, Illusion Of Control, Overconfidence, Risk Tolerance, Dan Risk Perception Terhadap Keputusan Investasi Pada Mahasiswa Di Kota Surabaya. *Ilmu Manajemen Volume*, *6*, 424–434.
18. Widiastuti. (2015). *Tes dan Pengukuran Olahraga*. Jakarta: Rajawali Pers.
19. Wahyuni, Sri dan Syukur Ibrahim. 2012. Asesmen Pembelajaran Bahasa. Bandung: PT. Refika Aditama.
20. Ghozali, Imam. 2016. Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Edisi 8). Cetakan ke VIII. Semarang : Badan Penerbit Universitas Diponegoro.
21. Sutawidjaya, Achmad H., Rosalendro Eddy Nogroho, Masyhudzulhak. 2015. Memahami Penulisan Ilmiah dan Metodologi Penelitian. Bagian Penerbitan Fakultas Ekonomi dan Bisnis Universitas Mercubuana. Bogor
22. Ismaryanti. (2008). Tes dan Pengukuran Olahraga (Cetakan 2). Surakarta: LPP UNS dan UNS Press.
23. Hudoyo, & Sutawijaya. (1998). Pendidikan matematika I. Jakarta: Dirjen Dikti Depdiknas.
24. Ton, H.T.H., & Dao, T.K. (2014). The effects of psychology on individual investors' behaviors: Evidence from the Vietnam Stock Exchange. Journal of Management and Sustainability, 4, 125.
25. Nurul Badriyah, 2010, 'Pengaruh Karakteristik Individu Sikap dan Persepsi terhadap Perilaku Kewirausahaan (Studi pada Industri Kecil Kerajinan Tangan & Handycraft di kabipaten Lamongan)', Tesis, Program Pascasarjana Fakultas Ekonomi, Universitas Brawijaya
26. Cho, J. and Lee, J. (2006) 'An Integrated Model of Risk and Risk-reducing Strategies', Journal of Business Research, 59(1), pp. 112–120.