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Effect of Risk Perception, Problem Framing, Risk Propensity, and Information Asymmetry to the Investment Decision in Capital Market

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ABSTRACT
The objective of this research is to analyze the effect of risk perception, problem framing, risk propensity, and information asymmetry to the investment decision in capital market. Data used in this research is the primary data collected from 55 respondent beginner investor in West Sumatera. Technique sampling used in research is Purposive Sampling, then the data is processed using analysis multiple linear regression. The results of this study show that risk perception affects investment decisions and risk propensity has influential on investment decision; problem framing and information asymmetry didn't affect the investment decision. R Adjusted Value Its square is 0,288, meaning risk perception, problem framing, risk propensity and information asymmetry can explain 28.8% of the investment decision. While the remaining 61.2% can be explained by other factors not tested in this research.

Keywords: *risk perception, problem framing, risk propensity, information asymmetry, investment decision*

1. INTRODUCTION

Investment is the management of financial activities using cash through the investment of funds, with the aim of earning profit in the future. Investment is the study of the process of allocating funds to one or more assets, including on financial assets and securities, real assets and foreign financial assets. Investing is not just analyzing numbers and making decisions to buy or sell various assets, but also includes considering technical and behavioral matters. From this opinion, it can be said that investment is an activity carried out by add a number of funds in the form of financial assets and real assets in order to earn profit in the future by considering technical and behavioral matters.

The general purpose of investing is to earn profit. The purpose of investment is to obtain compensation from the amount of money invested in a certain period, except for inflation, as well as due to uncertainty in future payments. the purpose of investment is to prepare a pension fund, to save in order to finance large expenses, to increase current income, and to protect income from tax. Thus, the purpose of investment is not only to get profit, but prosperity in the future. Investment decision making is an important factor that affects one's financial ability and financial well-being. Mastery of knowledge and skills in finance encourages individuals to undertake and engage in financial matters such as pension funds, education insurance, health insurance, taxes, investment in the capital market and access to financial institutions. On the other hand, when a person has the ability and convenience to access financial institutions, it has the potential to make him more consumptive and make impulsive purchases without considering the future, such as discounts and flash sales through online shopping, ease of having a credit card, an exposed lifestyle. on social media, and the spread of shopping centers and modern markets in various areas. If an individual does not have knowledge and skills in the field of finance, it is likely that he will make mistakes in managing financial resources, then the opportunity to achieve prosperity will be difficult to achieve.

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[1] respond to the above phenomenon by stating that socially responsible investment has an important role for both individual and institutional investors. A saver and investor tend to worry about what's going on with money saved or invested. For this reason, financial institutions need to have a greater understanding of the characteristics and behavior of individuals who intend to invest.

Behavioral finance is the study of psychological influences on finances and behavior. Behavioral finance was proposed to study which attempts to apply cognitive psychology studies to help explain the anomalies of standard financial theory and why individuals make irrational financial decisions. Behavioral finance is a reason behind a decision in investment. It is affect market prices related to individual cognitive and emotional biases. [2] conducted research or analysis in the Amman Stock Exchange. It is found the existence of behavioral finance and its effect on investment performance from an investor's point of view.

Risk is the most important factor related to investment decision making. An investor's investment decision can be influenced by income level and experience. [3] documented that investor with low incomes or who are new to the market usually have a negative risk perception when making investment decisions. Most studies have found a significant relationship between financial literacy, knowledge and investment decisions such as [4]. The studies highlight why professional and non-professional investors make investment decisions in the real world.

[5] stated that the perception of risk and risk propensity affect individual investment decision-making behavior in the face of uncertainty. Perceived risk can be managed if investors are aware of the level of their perceived risk [6]. Thus, the perception of risk is not a fixed price, because it is temporary and can change, even can be controlled. The perceived risk in this study is a subjective assessment process used by investors when assessing risk and the level of uncertainty [7].

This study intends to examine the inconsistency of the studies above. For this reason, this study includes psychological aspects in investment decision making in the form of risk perception, problem framing, risk propensity and information asymmetry.

1.1 Risk Perception

Investments have very good returns; investments can have significant value in the future and the right investment can work well is one indicator that is suitable for measuring risk perception [8]. Risk perception is someone way to interpreting risk, the different between the estimating and the reality that occurs. Perception has an important role in every existing risk of every investment instrument related to human behavior. It is because perception is the first of human act relating to risk. When someone know about the risk of an asset, a person act is perceived or about the level of risk [9]

Researchers define risk perception as beliefs held by individuals, groups, or society about the likelihood of a risk occurring or about the degree, magnitude, and timing of its effects, and as a behavioral study, researchers define it as the way people "see" or "feel" about potential harm. or danger. According to Rana [10] risk perception is a source of communication that can prepare investors to take risks according to their understanding. Shafi [11] attempted to explore the risk perception attitude of the investors but they left the exploration of the relationship between risk perception and investment behavior of a company employee for future research. The concept of risk perception tries to explain the evaluation of risk situations (events) based on instinctive and complex decision making, personal knowledge, and information obtained from the external environment.

H_1: There is positive and significant influence between risk perception and investment decisions

1.2 Problem Framing

Various empirical evidences that have been obtained that problem framing can cause behavioral differences in decision making. Kahneman & Tversky [12] explains the phenomenon of the framing effect through prospect theory which states that framing adopted by manager can affect the decision he made. Person processing information what he received became a decision on a problem based on the adopted framing.

In the context of investment decisions, a decision maker who receive feedback negative on previous investment decisions will are in a loss position or condition, and will view the next decision as an option between the definite loss that has occurred and the uncertain of future losses. In this situation, decision makers tend to looking for risk, choosing an uncertain loss that give change for improvement (additional commitment funds) versus a definite loss. Otherwise, if information is presented with a decision frame positive,

decision makers are faced with a choice between a definite profit and a profit in uncertain future.

Research conducted by Yahya and Surya [13] revealed that the framing effect influential as a determinant of commitment escalation in investment decisions but this depends from the background of the level of work experience of the subject. Framing like the prospect theory was initiated to have an effect on the subject inexperienced, but not influential to experienced subjects. Susanto found the framing of information have influence on decision making [14]

H_2: There is positive and significant influence between problem framing and investment decisions

1.3 Risk Propensity

Another psychological factor determining investment stated by [15] is risk propensity. Hunjra and Azam (cited by [16]) stated that there are three types of investors based on their risk propensity, which are risk averse (avoiding risk), risk neutral (neutral to risk) and risk preference /risk seeker (likes risk). [17] in their research on the factors that influence retail investors' behavior towards investment behavior in the capital market found that investors' risk propensity is one of the factors that affect investment decisions. Risk propensity of the investors indicates the size of the investor's interest in the facing investment risk, so this is very influential in determining decisions investment taken.

H_3: There is positive and significant influence between risk propensity and investment decisions

1.4 Information Asymmetry

Information asymmetry happen when one person or party has more access to information than another party. For example, investors in the stock market have less information than management of the company. The Information asymmetry varies from the very low to the very high level. Information asymmetry has big and real impact on decision of the investor in capital market. [18]

Beside the management, financial statements are prepared to be used by various stakeholders. However, those who are most interested in financial statements are actually external users (outside management). The stockholder as external users are in the most uncertain condition so the financial statements are really important for them [20]. While the management have direct interaction with the company and in the financial reporting. This condition causes the condition called asymmetry information, the unbalance the real information source between the insider (management) as preparer and outsider (stockholder) as the user of the company financial report.

According to [19] the information asymmetry occurs between outsider and manager as an insider. Managers have more complete information about the condition of the company than outsiders. When the stock price shows a value that is too high (overvalued), managers will tend to issue shares (taking advantage of high prices).

H_4: There is positive and significant influence between information asymmetry and investment decisions

2. METHODS

This study uses a causal conclusive research design to test hypotheses through sample data taken from the population of variables used. The object of this research is investment decisions which are identified as the dependent variable (Y). Cash Flow (X1).

This study is a causative study to test the hypothesis using sample data from a population of novice investors in West Sumatra. The object of this research is investment decisions which are identified as the dependent variable (Y). Risk Perception, Problem Framing, Risk Tendency and Information Asymmetry as independent variables (X).

The population is all novice investors in West Sumatra. The sample selection technique uses purposive sampling method which aims to obtain samples that meet predetermined criteria, including: the sample is over 18 years old and has been or has been a novice investor in West Sumatra.

Based on the data source, this research uses primary data, where the researcher obtains data directly from the respondents. [21] defines primary data as data or information obtained from the first source, either by written questions through questionnaires or orally through interviews for a particular study purpose.

This study uses a questionnaire data collection technique (questionnaire), where respondents are asked to fill out questions or statements on the questionnaire with answers that suit themselves. [22] define a questionnaire data collection technique (questionnaire) as a data collection technique carried out by providing a number of written questions to obtain information or data from respondents. The questionnaire used in this study is

a closed type of questionnaire. Closed questionnaire is a type of questionnaire whose alternative answers have been limited by researchers, making it easier to calculate scores, while open questionnaire is a type of questionnaire that allows 14 respondents to provide a long and in-depth explanation.

In collecting sample data, questionnaires were distributed and filled in by means of an electronic questionnaire. Questionnaires were distributed via links to respondents who are members of the Beginner Stock Investor (ISP) social media community group in several regional groups. The data collected includes demographics, psychological factors and stock investment decision making from respondents. The measurement scale used in this study is the Likert scale. Abdul [23] defines the Likert scale as a scale that is measured based on the sum of responses from respondents to statements related to indicators of a variable.

3. RESULTS

3.1 Validity Test

Validity test is a test used to see whether the instrument used in the study has high validity or not. The validity that needs to be done is to measure the suitability of the measuring instrument used by the experimenter [24]. A valid instrument is an instrument that can measure what is being measured [25]. To determine whether an item is feasible to use or not is to test the significance of the correlation coefficient at a significance level of = 5%, meaning that an item can be considered valid if it has a significant correlation with the total score of the item. The validity test in this study uses the Pearson Correlation, where the validity results can be known if the r table is smaller than the calculated [26].

3.2 Reliability Test

In addition to requiring valid data, research data must also be reliable. An instrument can be said to be reliable if the measurement results of the instrument are the same if the measurements are carried out on the same person at different times (with the same conditions) [24]. A reliable instrument is an instrument that produces a consistent measure. The reliability test in this study was carried out using the Cronbach's Alpha formula. In general, reliability test decision making can be categorized into [26]. Cronbach's Alpha value < 0.6 = poor reliability. 2) Cronbach's Alpha value 0.6-0.79 = accepted reliability. 3) Cronbach's Alpha value > 0.8 = good reliability.

Table 1. Reliability Statistics

Cronbach's Alpha	N of Items
.766	56

3.3 Coefficient of Determination Test

The coefficient of determination (R2) states the proportion of diversity in the variable that can be explained by the estimator variable. The value of R2 ranges from 0-1, the value of R2 which is close to 1 indicates the influence of the estimator on the supported variables is getting stronger. On the other hand, approaching 0 indicates a weaker influence.

Table 2. Coefficient of determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.583a	.340	.288	.38109	2.103

a. Predictors: (Constant), AInformasi, PFraming, PResiko, KResiko

b. Dependent Variable: KInvestasi

In the table of determination coefficient test results above, it can be seen that the large R Square (R2) is 0.288. This shows that the independent variables of risk perception, framing problems, tendencies, and information asymmetry can only explain 28.8% of the dependent variable of investment decisions. While the remaining 71.2% (100%-28.8%) is influenced by other variables not included in this study.

3.4 F Test

The significance test aims to determine the significance of the variables of Risk Perception, Problem Framing, Risk Propensity and Information Asymmetry on Investment Decisions. The tested hypotheses are Risk Perception, Problem Framing, Risk Tendency and Information Asymmetry on Investment Decisions. The significance test used the F test. The F test results obtained 6.574. When compared with 3.35 at a significance level of 5%, it is greater than (6.574 > 3.11) or p (0.00 < 0.05) so that Risk Perception, Problem Framing, Risk Tendency and Information Asymmetry together have an influence. significant to the Investment Decision.

Table 3. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.819	4	.955	6.574	.000b
	Residual	7.407	51	.145		
	Total	11.226	55			

4. DISCUSSION

4.1 Effect of Risk Perception on Investment Decisions

The first hypothesis assumes that the perception of risk has a positive effect on investment decisions. Based on statistical tests, this hypothesis can be supported. This shows that when the risk is high, the investment interest of novice investors also increases, this is because the relationship between risk and investment interest is in accordance with the theory of risk and investment return which states that the greater the risk obtained, the greater the return obtained and the greater the interest of investors. in investing and vice versa.

This research is supported by the theory of Tandelilin [27] risk is the possibility of a loss or negative return from an investment. The higher the risk of the stock, the better the investment made because it can generate returns (profits), on the contrary, the lower the risk, the worse the results of the investment made. The results of this study are in line with research conducted by Malik [28] that Risk Perception has a positive and significant effect on investment interest.

4.2 Effect of Problem Framing on Investment Decisions

The second hypothesis examines the relationship between framing problems and investment decisions. After statistical tests were carried out, the results showed that the hypothesis was not accepted. Problem framing is one of the reasons that influence decision making, the information presented (framed) to the decision maker can affect the type of decision taken. The effect of frames or framing is a phenomenon that indicates that decision makers will respond in different ways to the same decision problem if the problem is presented in a different format [29].

The results obtained are in accordance with research by Frasto Biyanto [30] which states that the effect of framing information will decrease with increasing individual experience. The results obtained do not support the prospect theory. Prospect Theory, which was developed by two psychologists Kahneman and Tversky, in the early 80s covers two disciplines, namely psychology and economics (psychoeconomics). The starting point of the theory is the analysis of a person's behavior in making (economic) decisions between two choices. Starting with Kahneman and Tversky's research on human behavior that is considered strange and contradictory in making a decision. The same research subjects were given the same choices but formulated differently, and they would exhibit two different behaviors.

4.3 The Influence of Risk Propensity on Investment Decisions

The third hypothesis states that there is a positive relationship between risk propensity and investment decisions. After statistical testing, the results obtained that the hypothesis can be accepted. A similar opinion was expressed by Putra [31] who argues that the higher the level of risk propensity, an investor will be more willing to choose risky types of investments. However, on the other hand, if the investor has a low level of risk, the investor will be more careful in choosing the type of low-risk investment. The same result is also supported by Bailey and Kinerson (2005) in Dewi Ayu and Rr. Iramani [32] states that risk propensity can be used as a very strong predictor in investment decisions making.

A person's propensity to accept risk will affect the decision of what type of investment they take. Someone who invests without collateral is a person who likes risk so that in the hope of getting a high profit. So, investors who have a high level of risk propensity will tend to choose the type of investment that is higher in risk in the hope of receiving high profits as well. On the other hand, investors who have a low level of risk propensity tend to be more careful in choosing investments because they are afraid to take high risks even though on the other hand, they also have high profits. According to research conducted by Yohnson [33] on young investors in Jakarta and Surabaya, it shows that risk propensity is one of the factors that has a very positive influence on investment decisions to be chosen. Dewi Ayu and Rr. Iramani [32] states that risk propensity has a significant effect on investment decision making.

4.4 Effect of Information Asymmetry on Investment Decisions

The fourth hypothesis states that information asymmetry affects investment decisions. After statistical tests were carried out, this hypothesis was not accepted. The results obtained are not in line with the asymmetry theory. Information asymmetry is a condition where one party has more information than the other party. For example, the company's management has more information than investors in the capital market. The level of this information asymmetry varies from very high to very low. Information asymmetry is a condition where one party has more information than the other party. For example, the company's management has more information than investors in the capital market. The level of this information asymmetry varies from very high to very low.

5. CONCLUSION

From the research study above, it can be concluded that the higher the perceived risk perception and tendency, the greater the investment decision. This is because the sample of respondents in this study already has sufficient knowledge about investment, where to obtain high returns must be accompanied by high risk as well. In addition, the behavioral motivation variable also significantly influences the investment decision variable. The reason could be because respondents in this study felt more confident if they knew the company's reputation was good and would have more confidence in the information and recommendations provided by other parties for the basis for making investment decisions.

While the other two variables, namely framing problems and information asymmetry have no influence on investment decisions. Based on the data obtained and the tests that have been carried out, the following conclusions can be drawn:

1. Simultaneously, risk perception and risk tendency have a positive and significant effect on investment decision
2. Problem framing and information asymmetry have no effect on investment decisions.

The independent variables of risk perception, framing problems, risk tendencies, and information asymmetry can only explain 28.8% of the dependent variable of investment decisions. While the remaining 71.2% (100%-28.8%) is influenced by other variables not included in this study

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