

CONTROL BEHAVIORS AFFECTING INVESTORS INVESTMENT DECISION MAKING (Studies on Students at Higher Education South Kalimantan)

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Abstract: Investors have strong reasons for making investment decisions, namely hoping to provide returns that are more than what they have invested. The investment decision is in the form of a decision to buy, sell, or maintain ownership of its shares. There are five factors that can influence investors in making investment decisions, including heuristics, risk aversion, financial tools, and firm-level corporate governance, and financial literacy. This study aims to determine whether these five factors influence investor behavior in making investment decisions. The survey was conducted on 100 active student respondents in South Kalimantan Higher Education. Primary data obtained through distributed questionnaires and then analyzed descriptively. The results of the study show that investors really consider these five factors in making investment decisions.

Keywords: *investor behavior, investment decision making*

1. Introduction

The world of investment and the capital market has always been an interesting topic of discussion in the current era of globalization. Investment and the capital market have become part of economic fundamentals not only in developed countries, but also in developing countries. Indonesia is currently starting to emerge from its new strengths in the investment sector and the capital market. Investment movement in the stock sector shows a positive track record until 2019. Observations on the fluctuation of the Jakarta Composite Index (IHSG). The JCI movement reflects the performance of stock trading in the Indonesian capital market as a whole. The movement of share prices has fluctuated in the period 2009 to 2019, it can go up or down, as well as the price of goods or commodities in the market.

Empirical studies prove that the factors that influence investors in making investment decisions are inconsistent. The survey was conducted on young people who dominate individual stock investors in the capital market targeting higher investment returns. Young investors (students) are not only close to technological developments, but also enjoy socializing and sharing experiences on social media. They will try to

avoid financial difficulties by setting aside income and making it part of their lifestyle for further investment. Students in universities in South Kalimantan with a sample of students who have made transactions in the capital market are the right objects in this study.

Based on the background description above, the authors are interested in conducting research on individuals making investment decisions with the title "Control Behavior Affecting Stock Investors in Investment Decision Making (Studies on Students at South Kalimantan Higher Education, 2015 - 2019)".

2. Literature review

Investation decision

According to Martalena and Malinda (2011) investment is a form of current consumption funding to obtain future consumption, in which there is an element of uncertainty risk so that compensation is needed for this delay. According to Fahmi (2015) investment is also known as investment. The concept of investment is actually one form that is often campaigned by the government to attract investors, both domestic and foreign investors.

An investment decision is a decision to allocate or place a certain amount of funds in a certain type of investment in order to bring benefits in the future with a certain period of time. This investment decision involves a long-term period, so the decisions taken must be well considered, because they have long-term consequences.

Behavior for Investing

Behavior and interest are two closely related terms. In the Dictionary of Psychology, behavior is a generic term that includes action, activity, response, reaction, movement, and operating processes which are measurable responses from a living organism. In a long tradition, it is argued that behavior contains a set of coherent limits. Behavior will be more meaningful if it is associated with something measurable. While intention is a planned decision that has a goal or belief that is oriented towards a specific goal. Intensity is the level of sensational experience associated with physical stimuli.

Factors that Affect Investment Decision Making in the Capital Market

Heuristic

Heuristics are shortcuts and rules of thumb caused by data processing errors. Heuristics are useful for reducing cognitive effort so that the decision-making process becomes easier so it doesn't take too much time. Heuristic can be said as a person's way of thinking in solving a problem or solving a problem by searching, finding, collecting sources of various data related to past events or events related to the problem at hand (Harjito, 2009).

Risk aversion

According to Abdul Halim (2005) risk is an uncertainty that affects goals and can lead to unwanted gains and losses. The expected return will always be directly related to the

level of risk that must be borne. If the tolerance for risk is neglected, then planning and implementation can make life unsettled due to risks that do not match the risk profile.

Financial tools

Financial tools are financial tools in the form of reports related to company finances. One of the financial tools is the company's financial statements. According to Kasmir (2014), financial statements are reports that show the company's current financial condition or within a certain period. So, it is concluded that financial statements are reports that can describe the company's financial condition during a certain period which can be useful for those who need these financial statements. According to Fahmi (2012), the purpose of financial statements is to provide information to parties in need about the condition of a company from the point of view of numbers in monetary units.

Firm Level of Corporate Governance

The implementation of corporate governance in a company is very important as a process to maintain the sustainability of the company's business in the long term, which prioritizes the interests of shareholders and stakeholders.

Financial literacy

According to Kim (2001) in Fitriarianti (2018) financial literacy is the basic knowledge that people need to survive in modern society. This basic knowledge involves knowing and understanding the complex principles of spending, saving and investing. Meanwhile, according to Lusardi and Mitchell (2007), financial literacy is the knowledge that a person has about financial instruments, including someone's knowledge of savings, insurance or insurance, investment and other financial instruments. Financial literacy can be interpreted as financial knowledge, with the aim of achieving prosperity.

Heuristic Influence on Investment Decisions

Heuristics is a person's way of thinking in solving a problem or solving a problem by searching, finding, collecting sources of various data related to past events or events related to the problem at hand. Kahneman and Tversky in Gozalie and Anastasia (2015) reveal that this phenomenon arises because most people rely on the rule of thumb in making decisions. Heuristic decision-making strategies are carried out quickly and sometimes do not use a lot of information because decision makers perceive it as a habit. Based on the description above, the research hypothesis is as follows:

H1: Heuristic (heuristic) affects the behavior of individual stock investors in making investment decisions on the Indonesia Stock Exchange for College Students in South Kalimantan.

The Effect of Risk Aversion on Investment Decisions

There are three types of investors based on the level of risk obtained, namely risk seekers, risk neutral, and risk averse. Investors with the risk seeker type tend to be aggressive and speculative in making investment decisions because they have the

perception that the relationship between return and risk is positive. Investors who are neutral towards risk will try to ask for an increase in return in line with the increase in risk. Investors who do not like risk or avoid risk (risk averse) will choose an investment with a lower risk than a higher risk with the same return. Because of these differences, it can be said that risk tolerance has an influence on decision making. In line with this theory, Quershi et al (2012) found that risk aversion is an important determining factor in investment decision making because investors often have a cautious attitude in making investment decisions. Similar research results were found by Farooq and Sajid (2015) that risk aversion has an influence on investment decision making for investment managers (funding) and retail investors in Pakistan. Based on the description above, the research hypothesis is as follows: Similar research results were found by Farooq and Sajid (2015) that risk aversion has an influence on investment decision making for investment managers (funding) and retail investors in Pakistan. Based on the description above, the research hypothesis is as follows: Similar research results were found by Farooq and Sajid (2015) that risk aversion has an influence on investment decision making for investment managers (funding) and retail investors in Pakistan. Based on the description above, the research hypothesis is as follows:

H2: Risk aversion (risk aversion) affects the behavior of individual stock investors in making investment decisions on the Indonesia Stock Exchange for university students in South Kalimantan.

Influence of Financial tools on Investment Decisions

Financial tools are financial tools in the form of reports related to company finances. One of the financial tools is the company's financial statements. According to Kasmir (2014), financial statements are reports that show the company's current financial condition or within a certain period. So, it is concluded that financial statements are reports that can describe the company's financial condition during a certain period which can be useful for those who need these financial statements. According to Fahmi (2012), the purpose of financial statements is to provide information to parties in need about the condition of a company from the point of view of numbers in monetary units. Research conducted by Quershi et al (2012) found that financial tools have an effect on investment decision making. Similar research results were also found by Susilawati (2018) that accounting information is still the main ingredient in seeing the performance of go public companies and is the main guide for individual investors in making stock investments. Based on the description above, the research hypothesis is as follows:

H3: Financial tool (financial tool) affects the behavior of individual stock investors in making investment decisions on the Indonesia Stock Exchange for College Students in South Kalimantan.

The influence of firm level corporate governance on investment decisions

Corporate governance is a set of regulations that regulate the relationship between shareholders, company managers, creditors, government, employees and other internal and external stakeholders relating to their rights and obligations, or in other words a system that regulates and controls the direction of strategy. and the performance of a

company (Qureshi, 2014). The implementation of corporate governance in a company is very important as a process to maintain the sustainability of the company's business in the long term, which prioritizes the interests of shareholders and stakeholders. Research conducted by Quershi et al (2012) states that firm level corporate governance affects investment decision making. Similar research results found by Susilawati (2018) prove that by looking at the value of a company's corporate governance level, investors will be more confident in making investment decisions. The results indicate that corporate-level corporate governance plays an important role in the factors influencing investment decisions. Based on the description above, the research hypothesis is as follows:

H4: Firm level corporate governance (strong corporate governance) affects the behavior of individual stock investors in making investment decisions on the Indonesia Stock Exchange for university students in South Kalimantan.

The effect of financial literacy on investment decisions

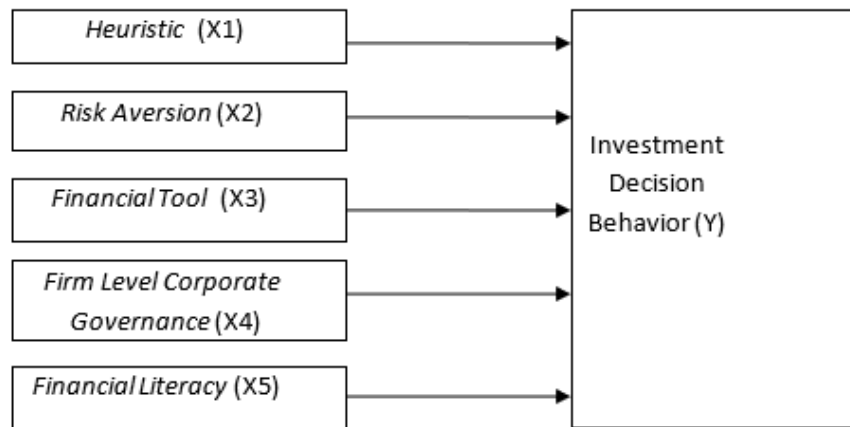
Financial literacy in this case is closely related to individual or personal financial management which includes investment decisions, funding, and good asset management. According to Kim (2001) in Fitriarianti (2018) financial literacy is basic knowledge that people need to survive and have the desire to invest their source of income with a choice of various types of investment. This basic knowledge involves knowing and understanding the complex principles of spending, saving and investing. Financial literacy has a basic dimension that a person must have the ability and confidence to use financial knowledge to make financial decisions. Pertiwi (2018) found that financial literacy has a positive effect on investment decisions. Al-Tamimi (2009) found an indication that there is a significant relationship between financial literacy and investment decisions. Based on the description above, the research hypothesis is as follows:

H5: Financial literacy (financial literacy) affects the behavior of individual stock investors in making investment decisions on the Indonesia Stock Exchange for university students in South Kalimantan.

Research Framework

The research framework is intended to provide an overview of the relationships that occur between variables. The theoretical framework in this study can be described as follows:

Figure 1. Research Conceptual Framework



Source: Developed for this research

The research framework above shows the influence of heuristics, risk aversion, financial tools, firm level corporate governance and financial literacy on investment decision behavior.

3. Methods

Types of research

This type of research is a quantitative descriptive analysis using primary data by distributing questionnaires that are distributed to respondents. Respondents in this study were student investors who invested shares in the Stock Corner. The research was conducted at public and private universities in South Kalimantan as research sites by selecting students from 2015-2019 to invest in stocks in the capital market. The unit of analysis in this research is individual students who invest in the Investment Gallery of each university that has an Exchange Corner in both public and private universities in South Kalimantan in 2015-2018. The type of data used in this study is primary data which is obtained directly from the respondents who are sampled. The data source of this research is primary data. The population in this study were students who invested shares in the Investment Gallery in their respective tertiary institutions in South Kalimantan. The research sampling method was accidental sampling technique with the determination of the respondents using proportional sampling (Ghozali, 2013).

Measurement

The variables used in this study were assessed using several items from different studies in the extant literature. All items were measured using a five-point Likert-type scale, in which respondents had to indicate their level of suitability with different statements (1: strongly disagree to 5: strongly agree). Heuristic measurement through 5 items. The measurement of risk aversion uses 5 items. The financial measurement tool uses 5 items. Measurement of firm level corporate governance uses 5 items. The measurement of financial literacy uses 5 items

Measurement of investment decisions using 4 items. The measurement of variables can be explained through the operational definitions of the variables below:

Table 1 Operational Definition of Variables and Measurement Indicators

Variable	Definition	Statement
(X1) <i>Heuristic</i>	Shortcuts and rules of thumb caused by data processing errors	I know Investments from my college friends
		I am interested in gaining insight into investing
		I prefer investing rather than saving
		I chose a well-known stock company and has a positive track record
		I chose stocks that are in high demand by many investors and don't have a bad record in the past
(X2) <i>Risk Aversion</i>	Avoidance of risks faced by a person to get a profit (return) in the future.	In my opinion, investing in the capital market can suffer losses.
		In my opinion, investing in the capital market does not necessarily guarantee my future needs will be met.
		In my opinion, investing in the capital market does not necessarily have a high level of security.
		I feel too much uncertainty when buying shares in the stock market for investment.
		I choose an investment with a low level of risk
(X3) <i>Financial Tool</i>	Financial tools as information for investors by looking at financial statements which are reports that show the company's financial condition at this time or in a certain period.	In my opinion, financial reports are useful and easy to obtain media as a means of determining investment policy
		I think all financial reports from various companies that I have read have the same form and method
		I think financial reports are able to provide information about the company's future performance
		I have no trouble reading and analyzing financial reports
		I feel that the analysis of financial information I use yields the same conclusions as other people's analyzes
(X4) <i>Firm Level of Corporate Governance</i>	Strong corporate governance by looking at the company's financial performance through the principles of corporate governance.	<i>Firm level corporate governance</i> in the company where I will invest has followed the rules according to the applicable laws
		The Firm Level Corporate Governance of the company in which I will invest has carried out knowledge and development in terms of compliance
		All companies that invest in have carried out a work plan review and a report on the implementation of the FLCG as part of the company's annual report
		All companies in which to invest have run business entities with correct and enforced principles

		I choose where I invest in companies that have high competitiveness
(X5) <i>Financial Literacy</i>	The knowledge that someone has about financial instruments, includes, someone's knowledge of savings or savings, insurance or insurance, investments and other financial tools.	In my opinion, financial knowledge is very important for one's health and success both in the present and in the future
		In my opinion, managing control and budgeting in investing is very important to manage finances and avoid waste
		My knowledge is sufficient about investing so that I can avoid my financial doubts in investing
		In my opinion, the level of education in the world of one's work has a very significant effect on one's income
		I act economically in all my financial aspects of investing

Source: Developed for research

Data analysis method

Analysis of the data used using the regression model path analysis. Validity testing to test research instruments. Reliability testing to test the reliable value of the variable. The feasibility test of the model is done by testing the coefficient of determination and the F test. Hypothesis testing is done to determine the acceptance of the hypothesis in this study. Path analysis is used to determine the magnitude of the influence of each influence between variables used by using the SPSS tool (Ghozali, 2016).

4. Result and Discussion

Result

Reliability and validity the scales

The validity test criteria obtained a correlation value between the item score and the total score which would then be compared with the r-Table value. Table-r at a significance of 0.05 with a 2-sided test and the number of respondents as many as 100 respondents, the r-table is obtained of 0.165. While the reliability testing criteria is to use a limit of 0.70.

Table 2. Validity and Reliability Test Results

Variable	Corrected Item- Total Correlation	Cronbach's Alpha
<i>Heuristic1</i>	0.868	0.753
<i>Heuristic2</i>	0.758	
<i>Heuristic3</i>	0.702	
<i>Heuristic4</i>	0.795	
<i>Heuristic5</i>	0.821	
Risk1	0.668	0.725
Risk2	0.679	
Risk3	0.333	
Risk4	0.376	

Risk5	0.386	
FinancialTools1	0.667	0.853
FinancialTools2	0.535	
FinancialTools3	0.863	
FinancialTools4	0.654	
FinancialTools5	0.677	
Corporate1	0.526	0.705
Corporate2	0.409	
Corporate3	0.460	
Corporate4	0.444	
Corporate5	0.479	
Literacy 1	0.425	0.704
Literacy 2	0.516	
Literacy 3	0.535	
Literacy 4	0.475	
Literacy 5	0.362	
Decision 1	0.581	0.737
Decision2	0.564	
Decision3	0.597	
Decision4	0.395	

Source: SPSS 2020 processing results

The table above shows that the instrument items describing the heuristic, risk aversion, financial tools, and firm level corporate governance are valid and reliable.

Model Feasibility Test

The feasibility test of the model by testing the coefficient of determination with SPSS processing results obtained an adjusted R square or adjusted R² figure of 0.779. This means that the heuristic, risk aversion, financial tools, firm level governance and financial literacy variables can explain the variation of the investment decision variable by 77.9%, while 22.1% is explained by other variables / factors outside the model studied. The feasibility test of the model is then carried out by the F test. The results of the F test show that the value of F count = 70,820 > F table = 2.29 (df1 = k = 5 and df2 = n - k - 1 = 100 - 2 - 1 = 94, $\alpha = 0.05$) can be seen in the appendix, with a significance number = 0.000 < $\alpha = 0.05$ (significant).

Hypothesis test

Table 3. Hypothesis Testing

Independent Variable	Dependent Variable	Beta	<i>t</i> Statistics	<i>t</i> Table	Sig	Ket
Heuristics (X1)	Investment Decision (Y)	.021	.405	1,660	.686	H1 is rejected
Risk aversion (X2)	Investment Decision	.215	2,445	1,660	.016	H2 is accepted

	(Y)						d
<i>Financial tools</i> (X3)	Investment Decision (Y)	.293	3,408	1,660	.001	H3	accepte d
<i>Firm level corporate governance</i> (X4)	Investment Decision (Y)	.367	5,140	1,660	.000	H4	accepte d
<i>Financial literacy</i> (X5)	Investment Decision (Y)	.152	2,485	1,660	.015	H5 is	accepte d

Source: SPSS 2020 processing results

Hypothesis testing results obtained hypothesis 1 heuristic positive effect on investment decisions is rejected because the t value is smaller than t table 1.660 and the significance is greater than 0.05. Hypotheses 2,3,4 and 5 (risk aversion, financial tools, firm level corporate governance, financial literacy have a positive effect on investment decisions) are accepted with the t value greater than 1.660 with a significance value less than 0.05.

Results of the Regression Model Path Analysis Test

The path analysis of the regression model for the influence of heuristics, risk aversion, financial tools, firm level governance and financial literacy on investment decisions can be explained in table 2. Based on the table of SPSS processing results, it can be seen that the regression coefficient (beta) or $\beta_1 = 0.021$, $\beta_2 = 0.215$, $\beta_3 = 0.293$, $\beta_4 = 0.367$, $\beta_5 = 0.152$ so that the regression equation can be drawn up as follows:

$$Y_1 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

So that:

$$Y_1 = 0.021X_1 + 0.215X_2 + 0.293X_3 + 0.367X_4 + 0.152X_5 + e$$

Thus it can be seen the magnitude of each effect:

1. Heuristics of Investment Decisions (Y) = 0.021 (Positive)

Heuristic (X1) has a positive effect on investment decisions (Y) but not significant because it is not significant so it cannot be interpreted.

2. Risk aversion (X2) on investment decisions (Y) = 0.215 (positive)

Risk aversion (X2) has a positive effect on investment decisions (Y). It is said that the higher the risk aversion, the higher the investment decision.

3. Financial tools (X3) on investment decisions (Y) = 0.293 (positive)

Financial tools (X3) have a positive effect on investment decisions (Y). It is said that the higher the financial tools, the higher the investment decision.

4. Firm level of governance (X4) on investment decisions (Y) = 0.367 (positive)

Firm level of governance (X4) has a positive effect on investment decisions (Y). It is said that the higher the firm level of governance, the higher the investment decision.

5. Financial literacy (X5) on investment decisions (Y) = 0.152 (positive)

Financial literacy (X5) has a positive effect on investment decisions (Y). It is said that the higher the financial literacy, the higher the investment decision.

Discussion

The heuristic behavior test results have no significant effect on retail investor investment decision making in the Indonesian capital market. This research is supported by Gozalie & Anastasia (2015) that heuristic behavior described by overconfidence and herding behavior does not have a significant effect on residential property investment decisions in Indonesia. The results of this study prove that retail investors in Indonesia do not have sufficient insight to invest, especially in the Indonesian Capital Market. The heuristic factor shows insignificant results because the retail investors who are respondents do not have sufficient information and lack of past experience, but have made a decision to invest.

Risk aversion has a significant positive effect on investment decisions, it can be interpreted that high risk aversion will be able to increase investment decisions. The results of this study prove the theory that risk aversion has an influence on decision making. The results of this study are in line with the results of research conducted by Quershi et al (2012) who found that risk aversion is an important determining factor in making investment decisions because investors often have a cautious attitude in making their investment decisions. Putra (2016) found that the higher the level of risk tolerance an individual has, the more investment decision making will be to choose the type of investment that has a higher risk, for example real assets. However,

Financial tools have a significant positive impact on investment decisions and it can be interpreted that the better the application of financial tools, the higher the investment decision making. The results in this study are in line with research conducted by Quershi et al (2012) who found that financial tools have an effect on investment decision making. Similar research results were also found by Susilawati (2018) that accounting information is still the main ingredient in seeing the performance of go public companies and is the main guide for individual investors in making stock investments. In other words, the availability of information from financial tools is a prerequisite for making investment decisions.

Firm level governance has a significant positive effect on investment decisions so that it can be interpreted that the higher the level of governance firm will be able to increase investment decisions. The results of this study are in line with research conducted by Quershi et al (2012) which states that firm level corporate governance has an effect on investment decision making. Similar research results found by Susilawati (2018) prove that by looking at the value of a company's corporate governance level, investors will be more confident in making investment decisions. Companies that implement corporate governance tend to get good supervision so that they can increase their finances.

Financial literacy has a significant positive effect on investment decisions. It can be interpreted that the higher the financial literacy, the higher the investment decision. The results of the study are in line with Pertiwi (2018) which explains that financial literacy has a significant positive effect on investment decisions. Al-Tamimi (2016)

found similar results, that someone with a low understanding of financial literacy will make bad investment decisions, while those who understand financial literacy well will make better investment decisions. Samsuri et al (2019) in their empirical research found that financial literacy has a positive effect on investment intentions.

Limitations and suggestions for future study

This research has been carried out in accordance with scientific procedures, however, it still has limitations including: from the time determined to carry out the research, it is difficult for researchers to find respondents who match the specified criteria because when this research is being carried out, the Covid-19 outbreak is currently spreading. so that the number of respondents studied was not many. The profile of respondents with a minimum investment period is not able to properly explain the behavior that can influence investment decision making.

The results of this study are expected to help investors, especially students who invest in the Investment Gallery, to pay attention to aspects of risk aversion, financial tools, firm level governance, and financial literacy in the investment decision-making process. So it is hoped that investors will not make decisions only from the investor's thinking and point of view. Investors should look for more information about the investment they make, because investment requires rational calculations and calculating the risks that will be obtained later.

For further research, seeing the adjusted R Square results is only 0.779, which means that the independent variable only explains 78% of the variance of the dependent variable, while 22% is still explained by other variables outside the independent variables in this study. So it is suggested for further researchers to test using independent variables such as cognitive bias and emotional bias. So that further researchers are expected to be able to get more accurate results regarding investment decisions.

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