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Individual Traits, Risk Perception, Financial Literacy & Investment Decisions

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ABSTRACT
The preferences of individual investors in making investment decisions are not only based on rational behavior like conventional financial science. Behavioral finance integrates a broad social science perspective in research in the field of financial economics. In this study, we investigate the variables that influence investment decisions in individual investors. The purpose of this study is to find out whether individual traits, risk perception and financial literacy affect investment decisions. We tested multiple linear regression with 475 survey respondents. We find that individual traits variables measured by emotional intelligence and locus of control affect the choice of investment instruments for individual investors. Individual traits variable measured by characteristic didn't affect investment decision. Risk perception affects investment decisions. Individual traits and risk perception variables were measured by several survey questions. We also find that financial literacy as measured by the scoring method influences investment decisions but not by financial literacy as measured by self-assessment. Only 37.47% (178 out of 475 people) respondents answered correctly over 80% of the financial literacy questions. Our result imply that policy makers should be careful to put financial advice forward as a mechanism to curb the ill effect of low financial literacy.

Keywords: *investment decisions, financial literacy, individual traits, risk perception*

1. INTRODUCTION

Humans as an investor with careful assess the risk and return of all the choice of investment. Preferences investor individuals in taking decisions of investment not only be based by behavior that is rational as the science of finance conventional. The purpose of this study is to find out whether individual traits, risk perception and financial literacy affect investment decisions.

There are many factors psychology, socio-cultural and environment that affect the behavior of investment. Bond et al. (2008) stated that investors are not rational, investors are only able to have a rationality that is limited (bonded rationality). Behavioral finance is present to explain the behavior is irrational.

Behavioral Finance integrates the perspective of science social are extensive in the research field of economics finances, according to Statman (1995). Behavioral Finance reflects the model of the behavior of human beings are formed by many variables, such as prospect theory, cognitive errors, self-control and others.

This study wants to see how one's financial decision style is influenced by the limitations of human cognitive behavior. Limitations are often times be a challenge to literacy finances. John et al., (2009) find that the theoretical perspective of behavioral finance in influencing the decision is determined by the environment and the things that affect the process of information for decision making. More and better state of demographic, then the decision making investment also led to the decision that is good.

Important concepts in psychology that address risk subjectivity have been articulated in a financial context. Yip and Cote (2013), Joshi (2013) there were many attempts to describe intelligence emotional (emotional intelligence) in the planning taking various kinds of risks. Hess & Bacigalupo (2011) propose that emotions can push decision -making which is good in terms of output as well as the process as a whole.

Locus of control (LOC) as one of the indicators of individual traits have been much discussed in the literature of risk behavior, entrepreneurship and taking the risk of health. According to Rotter (1966) the locus of control can be divided into two, namely: internal LOC and external LOC. Locus of control can predict the nature of the learning process in decision making.

Carpentier (2014) find that the relationship positive between locus of control by making decisions that risk. Baron (1968) is used to find the relationship positive between locus of control external and behavioral conservative decision - making investment. Research which conducted Brounen et al., (2016) shows the relationship positive between LOC which explains the factors behavioral and psychological that is important to take a decision finance. The discovery is also consistent with research that is conducted by Perry and Morris (2005) and Sugar & Aydemir (2017). The explanation concludes hypothesis 1.

H1. Individual traits affect investment decisions

Prospect theory is a revolution that explain how a decision can be made under the risks that exist and the theory is to bring the views recently on behavioral finance such as that described by Naughton (2002). Each investor's risk perception for investment decisions is also different. Hillson & Webster (2006) states that risk perception is influenced by many factors, including cognitive and emotional. Avoidance of risk (risk aversion) has become the explanatory occurrence of the behavior of investors risk (risky behavioral).

Sitkin & Weingart (1995) find that the return of a decision by the perception of risk influences decisions are risky. Grable (1998) defines risk tolerance as the maximum amount of uncertainty a person is willing to accept when making financial decisions. The importance of having tolerance of risk finance has been documented with both. The assessment process tends to be very difficult because the subjective nature of risk taking occurs in practice. Preference of investors in selecting the instrument of investment that the right can be seen one of them on the perception of investors against the risks that contained in the instrument of investment.

How an investor can choose the instrument that is riskier and choose the instrument that the risk is small is dependent on the personality of each investor and also factors other like conditions and situations that are being undertaken. Perceptions on the risks of the included into Behavioral Finance in which the behavior of investors can be predicted by knowing the personality, situation and condition, as well as the views of investors against the risk of the instrument of investment.). The explanation concludes hypothesis 2.

H2. Risk perception affects investment decisions.

Harrison (2016) find that behavioral finance and the psychology of cognitive not overly explain the decision finance someone, even for those who possessed literacy finances are good. Based on a survey carried out by the Authority Services Finance (OJK) in the year 2016, only 29.7% people of Indonesia have literacy finance. It that means only 29 people out of 100 people of Indonesia have literacy finance.

Although there are 67.8% people of Indonesia have been using the products and services of financial, case this does not mean that people Indonesia has had a literacy finances are good. It is proved that still many people of Indonesia have and use products and services finance without any understanding that adequate about things that.

Index literacy finance by sector services financial years of 2013 and 2016. There was an increase in the index of literacy finance amounting to 7.9% from the year 2013 until 2016. The level of public financial literacy can affect the level of public financial inclusion that is important for the level of the country's economy. The level of inclusion finances is either through the use of products and services finance will be easier for a country in the face of shocks financially and become one of the sources of funds to help the development of the country.

Various financial literacy programs to overcome the lack of consumer financial knowledge have been carried out. As far as where various programs to help improve investment decision is often times difficult to measure.

Lusardi and Tufano (2015) find no positive correlation between literacy finance and behavioral economy, but Atkinson & Messy (2012) revealed the low level of literacy finance individual. According to Rooij et al. (2011) errors in literacy finance it concerns the making of policy in various countries.

The higher the level of financial literacy, investors tend to choose equity or create a portfolio which is indicated by the high level of their investment choices. Aren & Zengin (2016) also find that investors with the level of literacy is low tend to choose deposit and currency of money foreign, while investors who have the level of literacy is high tend to buy stocks and create a portfolio. Agarwal et al. (2015) found the literacy financial impact on planning finances are much better. The explanation concludes hypothesis 3.

H3. Financial literacy affects investment decisions.

2. METHODS

This research is using primary data obtained with questionnaires were distributed to the subject of research. Retrieval of data from the subject of the research that is cross-sectional means retrieval of data is only going to do one time with the subject of research this is a citizen of Java and Bali which is a resident of native and immigrant, who aged 18 years to over 64 years, and ever and yet ever take decisions regarding investment.

Tool measuring it consists on instruments measuring the investment decision, risk perception, individual traits, factors demographics. Once done retrieval of data, before carried out the analysis statistics, then made up to first test the reliability and validity of instruments measuring. Test the validity and test reliability especially in advance of the questionnaire with the spread to 38 (three twenty- eight) respondents. All statistical tests use SPSS version 25. After the measuring instrument is declared valid and reliable, Multiple Linear regression is used to determine the effect of two or more independent variables with one dependent variable. We do a t-test to determine the effect of the coefficient of independent variable is partial to the dependent variable.

The collection of primary data is done during the 13 days of the date of 18 February 2020 up to 1 March 2020. In a study of this, the population of which became the object of study is they are aged 18 to 64 years who are spread in Java and Bali. The collection is done by using a questionnaire online up to meet the quota that is expected, 475 respondents.

3. RESULTS AND DISCUSSION

Table 1. Dependent Variable: The Choice of Investment

	T-Test Result	
		Sig.
(Constanta)	-2.217	0.027^{**}
Characteristics	0.474	0.636
Emotional Intelligence	2.310	0.021^{**}
Locus of Control	3.063	0.002^{**}
Risk Aversion	1.167	0.244
Risk Perception	-2.737	0.006^{**}
Measure Financial Literacy	6.421	0.000^{***}
Self-Assessment Financial Literacy	0.380	0.704

*, **, *** present significance at the 10*, 5% and 1% level, respectively

Tabel 1. present result of the regression. Individual Traits were measured using the dimensional characteristics, emotional intelligence and the locus of control showed the results were different. Characteristics has no effect on investment decisions. The results are consistent with studies that do Mudrak (1999) and Aren & Zengin (2016) and not in accordance with expectations in theory. Personality can indeed affect all actions a person does and affect investor preferences in choosing investment instruments. We can’t predict a person's investment decision just by its characteristics.

This research proves that one's investment decisions are influenced by emotional intelligence and locus of control. Emotions and rationality can develop decision making. The more high- level ability of a person in control of his emotions, the more good decisions that they make. The decision of investment is good here shown with a score of decision investment. Getting high scores, meaning the decision of investment they are already concerned with the diversification of risk in decision- portfolios that they take. The results were the same also shown by studies that do Schutte et al. (1998), Ciarrochi et al. (2001) and Aren & Aydemir (2017).

Same as with the nature of the personal that is measured by the locus of control. Locus of control as one of the indicators of individual traits have been much discussed in the literature risk behavior. Locus of control can predict the nature of the learning process in decision making. It is in line with research that is conducted

Risk Perception were measured using the risk aversion and risk perception also also shows the results of the different. Measurement of risk aversion was adopted from research Donthu & Gilliand (1996), Burton et al. (1998), Aren & Aydemir (2017) can’t see the effect on investment choices. Measurement of perception that was adopted from the research that is done Pasewark & Riley (2010), Aren & Zengin (2016) can see the influence the perception of risk on the choice of investment. The more high- level perception of risk , things that show that investors are increasingly concerned about the risks that would be their face , they really pay attention to profit and loss in investment and tend to want to have a level of safety that is equivalent to the returns they expect . This is also shown by the high investment choices, meaning they have created a portfolio to diversify their investments.

Literacy Financial were measured using a literacy finances were measured using the method of scoring and self-assessment also shows the results of the different. Research is finding the influence of literacy finances were measured using the method of scoring with a choice of investment. Kramer (2016) proposed that the maker policies must contribute create a mechanism to cope with the impact of the bad from the low levels of literacy finance to help communities in planning finances them. This study can’t see the effect of financial literacy by self-assessment on investment choices. It is caused by the sample in the study is not yet too believe themselves to assess the level of literacy finance them. In contrast with research that is conducted by Anderson (2015), they measure the self-confidence in literacy finances by methods combining self-assessment and literacy finances were measured by the method of scoring. It could be a suggestion to study further with a method that is much better.

4. CONCLUSIONS

The purpose of the study this is to determine and prove whether the characteristics of the individual, the perception of risk and literacy financial impact on the choice of investment. Research is already proved that the characteristics of the individual who visits of emotional intelligence and the locus of control, perception of risk and literacy finances were measured by the method of scoring impact on the choice of investment. It can be utilized the advisory finance professionals to help the client them to decide the investment. Research is also could be a reference to conduct research related to the method that is good in the measure variables.

The people should be more concerned about things that can influence their investment decisions, especially regarding the extent to which they understand financial literacy and the risks they will face when deciding to invest. Individual characteristics tend not to influence their decisions, but the things that influence decision making are very important in order to avoid attribution bias. The things that affect it are ability, effort, challenges encountered and luck.

This research can be used by professional financial advisors and financial companies to help their clients make investment decisions. The first step they need to know is how risk perception is and what is the level of financial literacy of their clients. This will underlie the investment decision suggestions that their clients will take.

The existence of dynamic changes in the economic environment, especially in the financial markets requires adequate financial literacy. Financial literacy requires informed financial decisions. The OECD emphasizes that the importance of finance among young people is a policy issue that must be addressed at the highest government level. The OECD encourages governments around the world to take financial literacy seriously by implementing initiatives to promote financial education. Financial education programs with adequate components fill the gap between financial education classes and the real world where consumers are faced with everyday financial decisions. Policy makers must create mechanisms to overcome the adverse effects of low levels of financial literacy.

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