SELF EFFICACY AS THE MODERATING VARIABLE IN FRAMING EFFECT ON INVESTMENT DECISION MAKING

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ABSTRACT

One of the responsibilities of company managers is to make decisions. Investment decision making is one example of what the managers need to consider. In addition, in making investment decisions, they need information. Submission of information can be framed into information that contains a positive (gain) or negative (lose) meaning. That framed information may affect investment decision making. Moreover, the managers' personalities also play an important role in decision making. Later in this research, the personalities of the managers will be measured by self efficacy (individuals' beliefs in their abilities). Self efficacy is related to the level of risk in decision making. Thus, this research aims to analyze the personalities of the managers as measured by self efficacy which can moderate the relationship between framing effect and investment decision making. Our experiment was conducted to 60 participants which were chosen randomly. A questionnaire was used to measure the level of their self efficacy and an assignment, in which the participants were to choose one of available options related to this research. The results of this research showed that individual's personalities played an important role in making investment decisions. Individuals with high self efficacy tended to make risky decisions, because they were confident and believed in their capabilites. In contrast, individuals with low self efficacy were the ones who were less confident with their capabilities, so they tended to make safer decisions. This research is expected to be useful for all companies in order to provide a broader image related to the importance of the managers' personalities in decision making.

Keywords: self efficacy, investment decision making, framing effect, risk taker and risk avoider.

INTRODUCTION

Managers have a substantial responsibility to make decisions and making investment decisions is one of processes which requires financial information. The word investment itself can be defined as a form of fund management to provide benefits by putting it on an allocation which is expected to provide more benefits (Fahmi, 2011, p.3). Investment decision is one of the important decisions that can determine the sustainability of the company.

They will also be required to make acceptable choices of decisions. Due to these demands, a relevant information will be needed to support them to make decisions. Information can be obtained from anywhere. The availability of information becomes an important factor in assessing the decision making processes and the quality of the decisions made (Yuliusman, 2013).

There are several possibilities that can happen when manajer obtain the information, one of which is framing. Framing is a way of presenting information in different ways, but shares the same meaning (Wardani and Sukirno, 2014). The prospect theory is one of the framing theories which states that a presentation of a similar problem with different framing produce different choices. Moreover, the existence of framing in information will affect the investment decision making processes.

The process of making investment decisions is a cognitive process which involves the acquisition, compilation, and use of information. This cognitive process forms individuals' self efficacy which plays an important role in making investment decisions. According to Bandura (1994), self efficacy is important because it involves individual's beliefs in their own abilities. Self efficacy can be used to forecast investment decisions that managers will take. Those who have high confidence in their abilities tend to choose difficult tasks, because they do not see challenges as threats to avoid. Therefore, when they are confronted with choices of investment decisions, they tend to choose risky ones. This research will test whether there is influence of self efficacy in framing effect and investment decision making

REVIEW OF LITERATURE

PROSPECT THEORY

The prospect theory suggests that decision makers are rational individuals. They are considered capable of processing information to generate the best decisions (Yuliusman, 2013). Subjects are given the same options but are formulated differently, and they will show two different behaviors. According to the theory, framing consists of two domains; they are positive and negative domain. On a positive framing, information will use positive meaning words like profit and gain, while on a negative framing, information will use words such as loss. Tversky (1979) states that when managers are exposed to information which is framed in a positive way, they tend to show risk-averse behavior. In contrast, when managers are exposed to information which is framed in a negative way, they tend to show risk-seeking behavior.

DECISION MAKING

Decision is a reaction to some alternative solutions made consciously by analyzing the possibilities of the alternative along with its consequences. Each decision will make the final choice, decision can be an action to be performed (Pasek et al, 2016). Decision making will result in success or failure, it has always been complicated, complex, and crucial to every organization (Wardani and Sukirno, 2014). Any information needed by managers as a basis for decision making has been gathered by subordinates. Appropriate decision making is obtained if the manager gets complete information to be considered.

SOCIAL COGNITIF THEORY

The social cognitive theory is established by the concept of human agency, which states that individuals are proactively involved in their developments and capable of measuring the control of their thoughts, feelings, and actions. In this theory, individuals are seen as the operators of their lives. They do not only look at the internal mechanisms governed by environmental events. This theory explains a comprehensive understanding on how individuals study ones' behavior in different contexts (Pajares, 2009). In addition, this theory also explains that people are not only exposed to the stimuli; they also take action in exporing, manipulating, and influencing the environment.

By adjusting the motivations and activities they undergo, they produce experiences which form symbolic, social, psychomotor, and other neurobiological substrates (Bandura, 1999). This theory was design to determine the cognitive processes in weighing gain and lose.

SELF EFFICACY

In this research, in addition to the external role, information, the role of internal also become important thing in decision making. Self efficacy is one of the variables that can measure individual personality. Bandura (1994) states that self efficacy is an individual's belief in his or her own ability to achieve a certain level of performance that will influence subsequent action. Individuals' with low self efficacy will tend to be less confident, whereas individuals' with high self efficacy will tend to have high confiden

HYPOTHESIS

Our research examined self efficacy as the moderating variable in framing effect on investment decision making. In the first hypothesis, we conducted different individual tests with high and low self efficacy by providing a positive frame on investment decision making. Second hypothesis, we would conducted different individual tests with high and low self efficacy by providing a negative frame on investment decision making.

The effect of positive framing on investment decisions with self efficacy as the moderating variable

Framing shows that decision makers will respond differently on the same issues if they are presented in different frames. Individuals tend to avoid risks when they are exposed to issues in positive domains. This is in line with the research of Arifin and Indra (2004), which states individuals tend to avoid risks when they are exposed to information in positive domains.

Self-efficacy is another thing that affects individuals in making investment decisions. According Bandura (1994), self efficacy is seen as individuals' judgements on their on abilities in reaching a certain level or performance which also affects their actions in the future. Krueger and Dickson (1994), in their study, found that managers with high self-efficacy levels set high goals and tended to achieve higher. Another research conducted by Reed (2012), states that individuals with high self efficacy tended to like challenges or something risky.

H1: in conditions with positive frames, individuals who have low self efficacy tend to choose safe choices compared to the ones who have high self-efficacy.

The effect of negative framing on investment decisions with self efficacy as the moderating variable

Framing is a phenomenon that suggests decision makers will respond differently to the same decision problem if the problem is presented in a different format (Kuhberger, 1998). The addition of word 'no' without changing the issues, changes sentences from positive into negative.

Individuals tend to take risks when information is presented in negative domains. This is in line with the research of Arifin and Indra (2004), states that individuals tend to take risks when they are exposed to the presentation of information in negative frames.

Associated to self-efficacy, in which, according to Bandura (1994), individuals with low self efficacy tend to be shy and avoid difficult tasks. In other words, individuals with low self efficacy tend to avoid risks.

H2: in conditions with negative frames, individuals who have high self efficacy tend to choose risky choices compared to the ones who have low self-efficacy.

METHODOLOGY

SUBJECTS OF THE STUDY

Subject in our research was college student Accounting Department in Economic and Business Faculty Soegijapranata Catholic University. Requirement for the subject in order to take part in this experiment is must has pass Management Accounting courses, because the subject is assumed to be a manager in the company. They can only make if they have passed related courses.

TYPES AND SOURCES OF DATA

The type of data used by the researcher is the primary data. The subject would fill in the questionnaire, read the scenario, do the manipulation check and finally make the decision. This type of experiment is a quasi experiment, because the subject would be conditioned as a company manager would be conditioned as a company manager which make an investment decision.

EXPERIMENTAL DESIGN

This research used 2x2 experimental design (framing effect and self efficacy) between subjects, where every cells have 15 subjects. This research uses experimental design in the form of case scenario that happened in the company with two decision-making options. Our research used 15 subjects in each group of conditions. Therefore, total sample used as many as 60 subjects with 4 conditions (2x2)

Table 1: Experimental Design

	High Self efficacy	**Low Self efficacy**
Positive Frame	1	2
Negative Frame	3	4

OPERATIONAL DEFINITION AND THE MEASUREMENT OF RESEARCH VARIABLE

Investment Decision Making as Dependent Variable

Investment Decsion Making in our research is defined as the level of risk chosen by the subject. The subject is assigned a scenario and from the scenario, subject would choose on of two choices (A or B). The result of this decision would be measured by likert scale from 1 to 7, where if the the choice closer to the number 1 it means the respondent tends to choose the less risky option and if closer to number 7 the respondents tend to choose more risky option.

Framing Effect as Independent Variable

Framing effect is defined as a frame that affects investment decision making to be chosen by subject. Framing effect would be divided into two types (positive and negative frame). They would be treatment variable, where coding 0 is for negative frame and 1 for positive frame.

Self efficacy as Moderating Variable

Self efficacy is a person’s belief in their ability (Bandura, 1994). Our research would classify subjects who have high self efficacy and low self efficacy by giving questionnaires to subjects. The questionnaire contain eight statements adapted from Chen et. Al (2001) with a choice of answers that strongly agree, agree, neutral, disagree and strongly disagree. The result of questionnaire would be converted to numerical 1 (strongly disagree) to 5 (strongly agree).

RESULT

In this research, subjects would fill the manipulation check before deciding the choice of investment decision. Manipulation check aims to determine the level of understanding of the subject associated with the task given by the researcher.

Table 2: The Number of Subjects

	Number of Subjects			
	High Self Efficacy with Positive Frame	**Low Self Efficacy with Positive Frame**	**High Self Efficacy with Negative Frame**	**Low Self Efficacy with Negative Frame**
Subjects involved in the experiment	26	17	25	15
Subjects who did not pass manipulation check	11	2	10	0
Subjects who pass manipulation check	15	15	15	15

Subjects that are not correct in answering the question of manipulation would be feared becomes biased in making investment decisions. Therefore, subjects who did not pass the manipulation check were not included in hypothesis test.

VALIDITY AND RELIABILITY

Testing the validity of the instrument in this study aims to determine whether the question points in the questionnaire is valid or not. Questionnaire in our research is used to determine the level of subjects' self efficacy. This test uses SPSS in which the indicators will be valid if they have smaller 'cronbach alpha item delete' value than 'cronbach alpha' value.

Table 3: The Result of Validity Test

	Cronbach Alpha	**Cronbach Alpha If Item Deleted**	**Conclusion**
SE_3	0,918	0,895	Valid
SE_4	0,918	0,902	Valid
SE_5	0,918	0,896	Valid
SE_6	0,918	0,907	Valid
SE_7	0,918	0,897	Valid

The table above shows that, in the questionnaire, subjects' self efficacy levels are valid, because statements number three, four, five, six and seven have smaller 'cronbach alpha item delete' value than 'cronbach alpha' value. Therefore, the researcher proceeded to the next steps of this research. In the next steps, the researcher only used five valid points stated above. The subjects' responses towards the questionnaire were used as the basis in measuring their self efficacy levels.

Table 4: The Result of Reliability Test

	Cronbach Alpha	**Conclusion**
Self Efficacy	0,918	Reliable

The table above shows that the value of 'cronbach alpha' is 0,918. The higher the number, the more reliable the questionnaire is. So, it can be concluded that the questionnaire used is reliable. Reliable means five points in questionnaire is dependable and trusted to be used to measure the subjects' self efficacy.

THE HYPOTHESIS TEST

Table 5: The Result of Hyphothesis Test

	Mean of Investment Decision		**α**	**Sig**	**Conclusion**
	Subjects with low self efficacy	**Subjects with high self efficacy**			
Hyphothesis 1 In conditions with positive frames, individuals who have low self efficacy tend to choose safe choices compared to the ones who have high self-efficacy. .	1,4667	3,7333	0,05	0,000	Hypothesis Accepted
Hyphothesis 2	1,8667	3,3333	0,05	0,038	Hypothesis

In conditions with negative frames, individuals who have high self efficacy tend to choose risky choices compared to the ones who have low self-efficacy.					Accepted

The table above shows the result of the hypotheses used in this study. The table also shows the sig value of 0.000 for positive framing. The value is significant in the significance level of 0.05, in which a significant influence is indicated. Moreover, from the table, it is also seen that the average number of investment decisions of individuals with low self efficacy is 1.4667. The number is lower compared to the ones with high self efficacy which is 3.7333. The lower the number of the average, the less risky the decisions made are. Therefore, it can be concluded that hypothesis 1, which states that in positive conditions, individuals who have low self efficacy tend to make less risky decisions compared to the ones with high self efficacy is accepted. Furthermore, the table also shows the sig value of 0.035 for negative framing. The value is significant in the significance level of 0.05, in which a significant influence is indicated. In addition, from the table, it is also seen that the average number of investment decisions of indviduals with high self efficacy is 1.8667. The higher the number of the average, the riskier the decisions made are. Therefore, it can be concluded that hypothesis 2, in which individuals with high self efficacy tend to make risky decisions, when they are confronted with negative framing conditions is accepted.

From those two hypotheses, it can be concluded that individuals' personalities influence their decisions when information is presented in the same framing, either positive or negative. Individuals with high self efficacy tend to make risky decisions. This is caused by their tendency to be confident in their own abilities. However, individuals with low self efficacy tend to have a low level of confidence in their abilities. Therefore, they tend to make safer decisions.

CONCLUSION AND RECOMENDATION

Based on the analysis and discussion of the research result, it can be concluded as follows:

1. In positive framing conditions, individuals who have low self afficacy tend to make safer decisions compared to the ones with high self efficacy. This hypothesis 1 is accepted, significant in the significance level of 5%. Therefore, it can be concluded that individuals who have low self efficacy tend to be less confident in their abilities, so they also tend to make safer decisions.

2. In negative framing conditions, individuals who have high self efficacy tend to make risky decisions compared to the ones with low self efficacy. This hypothesis 2 is accepted, significant in the significance level of 5%. Therefore, it can be concluded that individuals who have high self efficacy tend to be confident in their own abilities, so they also tend to make risk decisions.

3. Limitations in this study is as much as 22 subjects did not pass the test of manipulation, so there needs to be scenarios improvement so that can be easily understood by the subject.

4. The next researchers can use variables other than self efficacy to measure personality or individual behavior.

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