## EXPERIMENTAL TEST OF FRAMING AND NON-PROFESSIONAL INVESTOR'S DECISION: STUDY OF RISK INFORMATION IN IFRS NO. 7

#### Negina Kencono Putri Zaki Baridwan Supriyadi Ertambang Nahartyo

Jenderal Soedirman University
E-mail: negina\_kp@yahoo.com
Prof. HR Boenyamin Street 708, Purwokerto 53122, Central Java, Indonesia

#### **ABSTRACT**

This study attempts to predict the impact of framing in decisions that preceded the presence of risk information in the format of value at risk and sensitivity analysis, and also preliminary evidence in assessing the implementation of a predetermined standard. It was done experimentally with the design of between-within-subject design and 2 (Format: VAR & SA) x 2 (Frame: Gain & Loss) factorial using 15 students of Master of Accounting program and PPAK program that acts as a participant in the experiment. The result showed that there are no differences in decisions made by participants if the information is presented in the form of value at risk or sensitivity analysis. This suggests that participants did not give different weights to the format of risk reports that are presented, so it can be concluded that both the format of risk reports in this study did not affect the investment decisions. Thus, companies can choose one of two formats to meet the obligations of the risk statement presentation required by the IFRS No. 7. This study also provides additional evidence that the individual decisions can be influenced by framing and proves that theory within the framework of Prospect Theory plays a role in investment decisions.

**Key words:** Information on risk, value at risk, sensitivity analysis, non-professional investors.

## UJI EKSPERIMENTAL KEPUTUSAN INVESTOR FRAMING DAN NON-PROFESIONAL: STUDI INFORMASI RISIKO DI IFRS NO. 7

#### **ABSTRAK**

Penelitian ini ditujukan untuk memprediksi dampak framing dalam keputusan yang mendahului keberadaan informasi risiko dalam bentuk nilai pada risiko dan analisis sensitivias, dan juga sebagai bukti awal dalam menilai pelaksanaan standar yang telah ditentukan. Penelitian dilakukan dengan metode eksperimen dengan desain between-within-subject and 2 (Format: VAR & SA) x 2 (Frame: Gain & Loss) factorial menggunakan 15 mahasiswa program Magister Akuntansi dan program PPAK sebagai peserta dalam percobaan. Hasilnya menunjukkan bahwa tidak adanya perbedaan dalam keputusan yang dibuat oleh peserta jika informasi disajikan dalam bentuk nilai pada risiko maupun analisis sensitivitas. Hal ini menunjukkan bahwa peserta tidak memberikan bobot yang berbeda pada format laporan risiko yang disajikan sehingga dapat disimpulkan bahwa kedua format laporan risiko dalam penelitian ini tidak mempengaruhi keputusan investasi. Dengan demikian, perusahaan dapat memilih satu dari dua format untuk memenuhi kewajiban terhadap penyajian laporan resiko yang diperlukan oleh IFRS No 7. Penelitian ini juga memberikan bukti bahwa keputusan individu dapat dipengaruhi oleh framing dan membuktikan bahwa kerangka Teori Prospek berperan dalam keputusan investasi.

Kata Kunci: Informasi risiko, nilai risiko, analisis sensitivitas, investor non-profesional.

#### INTRODUCTION

When capital market has grown very fast, the financial statement of any companies has become an important part in investment decision. Some researches indicated that information financial statements have value that may benefit for investors in decision making process (Smith and Reiter, 1996; Rajgopal, 1999). One of information that can be presented in financial statement is information on risk. Information in risk report may benefit investor in at least two ways. First, investor can use information in disclosing risk to revise or confirm their expectation on firm exposure related to interest rate, exchange rate, and change in commodity price. Second, investor can use estimation of risk exposure revision to assess its impact on firm as market price or price change whenever it occurs after report issued (Roulstone, 1999; Linsmeier et al, 2002; Campbell et al, 2003).

International Financial Reporting Standard (IFRS) No.7: Financial Instrument: Disclosures, which is global accounting reporting standard, states that firm shall disclose risk report in quantitative and qualitative report. For the intension, firm can present it in value at risk or sensitivity analysis format. Therefore, it is necessary to do a study on impact of each risk reporting format on investment decision in capital market in Indonesia by involving non professional investor. This study was done in Indonesian capital market context, in which regulation and implementation of its financial accounting standard adopt IFRS. In Indonesia, standard on risk reporting is regulated in Indonesian Financial Accounting Standard (PSAK) No. 60 that is effectively valid from 1 January 2012 on Financial Instrument: Disclosure. The PSAK No. 60 provide alternative for preparing risk report in two report formats: value at risk (VAR) or sensitivity analysis (SA).

This study was done in the context of Indonesia's capital market environment. As such, it is different from the previous ones. Properties and environmental conditions in

Indonesia are different from the USA. The difference is that one of them occurred in the availability of accounting information, particularly with regard to market risk quantitatively. It is expected to influence the investment decision making process in Indonesia, involving non-professional investors. Test on risk reporting format in this research was also done in order to prove framing effect.

This experiment study involves students of Master of Accounting Program and PPAK program to test whether different risk information formats may influence behavior of investment decision making. Master of Accounting Program and PPAK students were involved as participant because they were able to be surrogate of non-professional investor. Students in the program are considered to have the analytical skills to the financial statements are based on theoretical knowledge they have so they are able to performing tasks that have high complexity (Elliot et al, 2007).

Preliminary evidence of the study on the impact of risk can be used by standard maker as one of bases to evaluate mandatory implementation of the standard. This research also gives benefit for firm issuing risk report information, in which the firm can chose risk report format that is expected to give greatest benefit and can increase value of the firm, particularly related to stock investment decision. This research also tries to investigate framing effect, in which information in risk report can change one's expectation and judgment in making investment decision.

## THEORETICAL FRAMEWORK AND HYPOTHESIS

## Preparation of Liability Risks for Corporate Banking in Indonesia

Bank Indonesia (BI) on July 1, 2009 issued Bank Indonesia Regulation number 11/25/PBI/2009 instead of Bank Indonesia Regulation number 5/8/PBI/2003 governing the Application of Risk Management for Commercial Banks. It introduces the obligation to draw up a series of risk management

procedures and methodology used to identify, measure, monitor, and control risks arising from the business bank consisting of 8 categories: credit risk, market risk, liquidity risk, operational, legal risk, reputation risk, strategic risk, and compliance risk. Risk reports prepared in the form of qualitative statements and such regulations shall be binding and mandatory to be implemented for the commercial banks operating in Indonesia.

Basel II, published in 2006 is the recommendation of banking laws and regulations both, as the improvement of Basel I, which was published by the Basel Committee on Banking Supervision of banking regulators are required to make provision how much capital banks must set aside as a protection against the risk financial and operating a bank may face. Basel Committee on Banking Supervision is an institution formed by the central banks of countries of the G10 in 1974, consisting of senior representatives of banking supervisory authorities and central banks of G10 countries (Belgium, Canada, France, Germany, Italy, the Netherlands, Sweden, Switzerland, United Kingdom, United States) and representatives from Luxemburg and Spain.

The recommendations in Basel II is intended to create an international standard that governs the protection against various risks that may arise due to changes in regional and international economic conditions. In the Basel II explained that the credit risk can be calculated with three different levels of complexity, which is the standard approach (standardized approach), Foundation IRB (internal ratings-based), and Advanced IRB. Operational risk is calculated with three approaches, namely the basic approaches (basic indicator approach or BIA), the standard approach (standardized approach, or STA), and the advanced measurement approach (AMA). In the meantime, the approach is usually chosen for the calculation of market risk in Basel II is the approach of VAR (value at risk).

## Risk Report Format Based on IFRS No. 7 and PSAK No. 60

The Indonesian Institute of Accountant (IAI) through Financial Accounting Standard Board (DSAK IAI) in 2010 issued Indonesian Financial Reporting Standards No. 60 on Financial Instrument: Disclosures (PSAK), which was effective from 1 January 2012. Most of this PSAK is adopted from IFRS No. 7: Financial Instrument: Disclosures, with some necessary modifications.

The objective of this IFRS is to require entities to provide disclosures in their financial statements that enable users to evaluate: (a) the significance of financial instruments for the entity's financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the reporting date, and how the entity manages those risks.

First, the qualitative disclosures describe management's objectives, policies and processes for managing those risks. Second, the quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. Together, these disclosures provide an overview of the entity's use of financial instruments and the exposures to risks they create. The IFRS applies to all entities, including entities that have few financial instruments (e.g. a manufacturer whose only financial instruments are accounts receivable and accounts payable) and those that have many financial instruments (e.g. a financial institution most of whose assets and liabilities are financial instruments).

When this IFRS requires disclosures by class of financial instrument, an entity shall group financial instruments into classes that are appropriate to the nature of the information disclosed and that take into account the characteristics of those financial instruments. An entity shall provide sufficient information to permit reconciliation to the line items presented in the balance sheet. The principles in this IFRS complement the prin-

ciples for recognizing, measuring and presenting financial assets and financial liabilities in IAS 32 Financial Instruments: Presentation and IAS 39 Financial Instruments: Recognition and Measurement. The IFRS also requires information about the extent to which the entity is exposed to risks arising from financial instruments, and a description of management's objectives, policies and processes for managing those risks. Together, these disclosures provide an overview of the entity's use of financial instruments and the exposures to risks they create.

PSAK No. 60 standard contains firm obligation to disclose risk report in quantitative and qualitative disclosures. There are two alternatives of risk report disclosures: value at risk and sensitivity analysis. Value at risk is a method of disclosing firm risk in form of greatest lost the firm experiences through instrument market risk sensitivity, in probability. Meanwhile, sensitivity analysis tries to measure near term potential loss that emerges from hypothetical change in firm market rate (Linsmeier et al, 2002).

Hirshleifer and Teoh (2002) suggest that the investor has the attention and the ability to process information is limited. Consequence of that is that the disclosures contain information equivalent to that will cause a different effect among investors, depending on the shape or appearance, or presentation format. This also applies to disclosures that are not equivalent. In the research model proficiency level, with the underlying assumption that investors have limited attention to the disclosure or the information, the information submitted is relevant and easy to process format would be easier to be absorbed by investors compared with irrelevant information or implicitly that only displays set public information. This is consistent with the results of Dietrich et al (2001) explicitly stating that the disclosure made by management is one of the best estimator for the uncertainty in the market and be able to reduce the bias on the rise in security prices, though it overlaps with the disclosure of information in financial statements.

Result of the studies indicated that risk report may reduce trading volume sensitivity that is based on stock market price level (Raigopal, 1999; Roulstone, 1999; Linsmeier et al, 2002). In addition, in US stock market context, report format is proved having balance value for investor, and there is no different investor response on value at risk format and sensitivity analysis format because both alternatives are considered being able to disclose information in explicit manner and the best estimator for uncertainty occurring in market and can reduce bias on security price rise (Hodder and McAnally, 2001; Linsmeier et al, 2002; Dietrich et al, 2001). Therefore, the first hypothesis is formulated as follow:

H1: Firm that report risk information will get better appreciation from non-professional investor than firm that do not report risk information.

## Framing Effect in Prospect Theory Framework

Prospect Theory is one of theories that try to explain effect of framing (Kahneman and Tversky, 1979; Tversky and Kahneman, 1981). Prospect Theory explains that information can change expectation and judgment in making decision. The theory states that a decision maker in making decision will prepare prospect analysis through two steps. The first step is psychological editing process that occurs in order to organize prospect through a neutral referential point whose value is determined null and will result in decision from positive or negative deviation description. The second step is reformulation of choice, choice simplicity (heuristic) and evaluation.

Framing indicates that decision maker will respond in different ways on same decision problem when the problem is presented in different format (Kuhberger, 1998; Levin et al, 1998). Framing may be distinguished in two areas: framing effect and reflection effect. Framing effect emphasizes on same decision problem with different frame, while reflection effect involve two different deci-

sion problems.

Term framing effect refers to change in different description of same problem and how information is introduced to explain a specific problem and provide actual problem area without change so framing effect induce bias decision, while when there are two different problems and lead to different response, it may be considered as a reflection effect and it requires different area without depends on problem form (Rutledge and Harrell, 1994).

## Framing Effect in Decision Making Process over Accounting Information

Framing effect in decision making is explained by Tversky and Kahneman (1981). The researches revealed positive words in a problem and the result show majority subject chose to solve problem in form of positive word arrangement. The choice is in gain area that is without-risk alternative, and less chose alternative with risk. Meanwhile, problems disclosed with negative word are less chose although the point of the problem is same to that presented with positive words. It is called as framing effect, in which a same problem with different frame can result in inverse choice or different choice.

Framing effect involves a problem with two frames (positive and negative). When problem is presented in positive words, the problem will be considered as gain and have tendency to avoid risk. Meanwhile, when problem is presented in negative words, decision maker will feel loss.

Quattrone and Tversky (1988) in his study that examined the decision of voters in a hypothetical election candidates show leadership when someone thinks of himself is in the domain of losses, caused by a decline in economic conditions, and then he will have a tendency to give support to the riskier candidate challenger or less known. While they are at the domain profit, someone will be more risk averse, like things are better known, more secure, and for the choseion of a hypothetical case in these

studies are the candidate of the ruling.

The study describes the problem faced with a risky option and will result in a person's irrational acts committed by one of Shiller (1995). The study concluded that a person who takes actions or decisions resulting from the emergence of an irrational fear to accept disappointment. A person generally has the tendency or the tendency to feel disappointed when they make mistakes that result from the decisions they take. To avoid feeling disappointed that someone often take action that makes his behavior seem irrational. Irrational act of a person is often performed in unsafe conditions and a loss. Irrational action is performed, is designed to minimize regret.

Koonce et al (2005) indicated that in framing effect, only disclosure about firm loss can describe firm risk and it is used by investor to assess same risk level for the firm with different disclosure base. In addition, information on potential loss contained in risk disclosure is not only directly mandatory through risk assessment effect but also indirectly through effect of assessment by investor. Therefore, when financial information is determined, decision maker should beware of information presentation format to avoid possible framing effect. Therefore, the second hypotheses are formulated as follow: H2a: Information risk presentation with value at risk and sensitivity analysis format that is stated in positive frame format will lead to non professional investor choosing risky decision.

H2b: Information risk presentation with value at risk and sensitivity analysis format that is stated in negative frame format will lead to non professional investor choosing less risky decision.

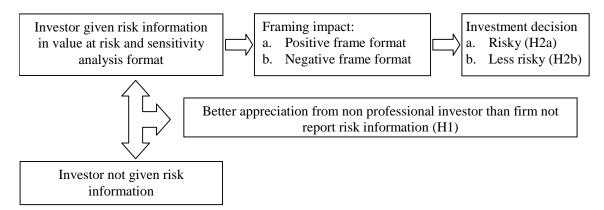
The research framework is shown in Figure 1.

### RESEARCH METHOD

#### **Participants**

Participants in this study were students of Master of Accounting Program and PPAK program, with condition having pass Portfo-

#### Figure 1 Research Framework



lio Management and Investment Analysis and/or Financial Report Analysis courses. The participants that have met above condition can be surrogate for non-professional investor category.

This study also used manipulation check as procedure that should be done by the participants after they follow experiment. In addition, the candidates should also answer demographical questions such as sex, age, and courses they have taken. From 23 students as participant candidates, 15 of them passed the requirements and manipulation check.

#### **Design and Experiment Procedure**

Table 1 indicates design of experiment in form of criteria and treatment that will be given.

The experiment used between-withinsubjects designs and 2 (Format: VAR & SA) x 2 (Frame: Positive & Negative) factorial (Table 1). Two independent variables were risk report format and report frame. Criteria and treatment framing consist of framing effect (positive frame) for value at risk and sensitivity analysis risk report format and framing effect (negative frame) for value at risk and sensitivity risk report format. Dependent variables was investment decision indicated with two decision categories, risky (buy and sell) and less risky (hold). Experiment asked participant to choose between two investment decision options, with some risk choices in value at risk and sensitivity

analysis risk report that is presented in positive and negative frame. Both options were buy/sell and hold stock they have.

#### **Variables**

Independent variable in this study consists of report format and framing. Risk report format consisted of value at risk and sensitivity analysis format. Meanwhile, framing relates to how a fact or information is presented (Tversky and Kahneman, 1979; 1981; Rutledge and Harrel, 1994). Framing in this study is in positive frame and negative frame. Decision type was defined as result of decision making by considering financial information of risk that have been obtained and analyzed. Dependent variable consisted of investment decision. Measurement of investment decision is based on result of case study completion by participant in buy/sell (category score 1) and hold (category score 0) on stock they have.

#### **Experiment Instrument**

Instrument adopted from Chang et al (2002) and Maines and McDaniel (2000) that has been modified. Experiment instrument was conducted in class for about 30 minutes. In first part, participants were asked to play as investor facing two stock portfolio alternatives, with accompanied risk information. Then, participants were asked to choose one of the two investment decision options, with some risk choice in value at risk and sensitivity analysis risk report presented in posi-

Table 1
Experiment Design

Treatment	Positive frame	Negative frame
Value at Risk (VAR)	1	3
Sensitivity Analysis (SA)	2	4

Table 2.
Participant Demography Data

Item	Amount
Sex:	
• Male	5
• Female	10
Age:	
• 20-30	12
• <30	3
Course/program followed:	
<ul> <li>Portfolio Management and Investment Analysis</li> </ul>	15
• Financial Report Analysis	15
Stock Exchange Simulation	8

tive and negative frame. Both investment decision options were buy/sell and hold stock they had.

In second part, participants were asked to fill manipulation check that consisted of five questions. Each question described economic condition of hypothetic firm and participant should determine whether the condition is bad news or good news. Participants that were able to answer right 3 questions were considered pass from manipulation check procedure. The third part of the experiment was filling demographical data of participant.

Experiment process was aided by an experimenter in charge of delivering filling instruction to participant and overseeing experiment process. In the experiment process, participants were banned discussing decision that will be made with other participants. Experiment was finished with brief explanation from experimenter about intention of the study.

#### **Data Analysis**

To test difference in decisions made by investors in framing effect framework, Chisquare test was used. When significant p-

value was obtained in testing among two treatments, participant will fill different information presentation they received.

Significant different will influence investment decision making. The difference is different decision at making decision presented in positive frame and negative frame in Prospect Theory framework that influence significantly in making investment decision. Meanwhile, when significant p-value was obtained in differential testing between frames then, there was different decision made due to different problem frame.

Test was also done on significant result of ANOVA test that if it is not significantly different between value at risk and sensitivity analysis formats, it indicates that both formats have same influence (have same weight) on investment decision.

# DATA ANALYSIS AND DISCUSSION Result of Participant Demographical Mapping

Before the experiment, participant candidates were required to fill in demographical sheet containing sex, age, and course/ program they have followed. The following is result of participant demographical mapping.

Table 3
ANOVA Analysis of Value at Risk (VAR) and Sensitivity Analysis (SA) for H1

Treatment	F	Sig.
VAR_given and not given risk information	.123	.009
SA_ given and not given risk information	.425	.000

Table 4
Result of Statistical Test Chi Square for H2a, H2b

Treatment	Negative frame		Positive frame	
Treatment	Hold	Buy/Sell	Hold	Buy/Sell
Panel A				
Value at Risk (VAR)	13 (86.7%)	2 (13.3%)	4 (26.7%)	11 (73.3%)
Chi-Square Statistical Test 1: Chi-Square dan p-value (H2a)	3.267 (0.071)		8.067 (0.005)	
Panel B				
Sensitivity Analysis (SA)	14 (93.3%)	1 (6.7%)	3 (20%)	12 (80%)
Chi-Square Statistical Test 1: Chi-Square dan p-value (H2a)		400 020)		.267 001)

Table 5
Additional Analysis ANOVA Value at Risk (VAR) and Sensitivity Analysis (SA)

Treatment	F	Sig.
Positive frame_VAR	.175	.679
Negative frame_SA	.350	.559
Portfolio Management and Investment Analysis		
Financial Report Analysis Stock Exchange	.244	.476
Simulation		

#### **Hypothesis 1Testing**

Hypothesis 1 states that firm reporting risk information will get better appreciation from non-professional investor than firm not reporting risk information. Result of statistical test for this hypothesis is showed in ANOVA calculation with significance of 0.009 and 0.000 (Table 3).

The significance value is below 0.05, so it can be concluded that there are significant differences in the decision which is based on a report that comes with the risk information, the report without risk information. Participants in this study provide a better appreciation, indicated by an increased level of confidence in the choseion decision and

the change of decision to sell or hold the shares they own a hypothetical buy the shares. It means that the test indicate that participants were influenced by risk report.

This result show that company which preparing a report which presented a comprehensive risk can affect the confidence of participants in formulating investment decisions. Thus, the banking companies in Indonesia need to start presenting risk information compiled in detail in its financial statements. The presentation of risk information is to fulfill the obligations required by SFAS No. 60 and also aims to improve the assessment of the performance of the company by analysts and investors.

#### **Discussion of Hypothesis 1**

The results of statistical tests in this study show that there are significant differences between the investment decisions made by the participants based on financial statements that are equipped with the risk report and financial statements without the risk report. Format the report does not affect the risk of a structured investment decisions.

Therefore, it can be concluded that the findings are based on statistical testing supports the first hypothesis in this study. Participants in this study give a different appreciation to the companies that reported information risk than companies that do not include risk information. Appreciation given by the participants rise toward better. This is indicated by the positive difference between investment decisions based on financial statements that are equipped with qualitative risk information only with investment decisions based on financial statements without the risk report.

The results are consistent with the results of the study Rajgopal, 1999; Roulstone, 1999; Linsmeier et al, 2002; Schrand, 1997 which found the results of that report is presented in full risk can affect the sensitivity of trading volume based on the level of stock market prices. Additional risk information also increases the confidence of participants in formulating investment decisions.

Results of this research by Hodder and McAnally (2001), Linsmeier et al (2002) and Dietrich et al (2001) that found result that report format has balance value for investor and there is no different investor's response over value at risk and sensitivity analysis formats because both formats are considered being able to disclose explicitly information and the best estimator for uncertainty occurring in market and can reduce bias over increase in security price.

## Hypothesis 2a and 2b Testing for Value at Risk Format

Analysis H2a is hypothesis test in Prospect Theory framework, that is, test over each individual participant decision considered as non professional investor, on investment decision presented in positive/negative frame with risk information in value at risk and sensitivity analysis format. Test was done to identify whether there is different decision made by individual when investment information is presented in positive frame, when risk information that follow it is presented in value at risk and sensitivity analysis format.

As revealed in Panel A Table 4, when choice is stated in value at risk format with positive frame, of 15 participants, 11 participants chose option A (risky) in sell their stock, and remaining 4 participants chose option B (less risky) of hold their stock. So, 73.3% participants chose risky alternative (option A), when decision information is presented in positive frame. Result of Chi Square 8.067, p-value 0.005 in Table 4 indicates difference in decision making by individuals, when decision information is presented in positive frame. The finding supports H2a.

Meanwhile, when choice is stated in value at risk format with negative frame, from 15 participants, two participants chose option B (buy/sell) and other chose option A (hold). Therefore, 86.7% individual chose less risky option (option A) when decision information is presented in negative frame. Result of Chi-square 3.267, p-value 0.071 in Table 4 indicates no difference in decision making by individuals, when decision information is presented in negative frame (with level of confidence 95%). The finding supports H2b.

## Hypothesis 2a and 2b Testing for Sensitivity Analysis Format

Analysis 2a is hypothesis test in Prospect Theory framework, that is, test over each individual participant decision considered as non professional investor, on investment decision presented in value at risk and sensitivity analysis format. As revealed in Panel A Table 4, when choice is stated in sensitivity analysis format with positive frame, of 15 participant, 12 participants chose option A

(risky) in sell their stock, and remaining 3 participant chose option B (less risky) of hold their stock. So, 80% participants chose risky alternative (option A), when decision information is presented in positive frame. Result of Chi Square 11.267, p-value 0.001 in Table 4 indicates difference in decision making by individuals, when decision information is presented in positive frame. The finding supports H2a.

Meanwhile, when choice is stated in sensitivity analysis format with negative frame, from 15 participants, one participant chose option B (buy/sell) and other chose option A (hold). Therefore, 93.3% individual chose less risky option (option A) when decision information is presented in negative frame. Result of Chi-square 5.400, p-value 0.020 in Table 4 indicates difference in decision making by individuals, when decision information is presented in negative frame. The finding supports H2b.

#### Discussion of Hypothesis 2a and 2b

Results showed that participants in this study chose to take action that is not at risk when information is presented in a positive frame. Gains or losses of information accompanying the instrument of risk information in the experiment did not influence the investment decisions they do. Investment decisions that they're a part of decisions that tend to avoid risk. The finding is consistent with Paese et al (1993) and Rutledge and Harrell (1994).

Information involves risks that are positive and will generate a certain level of gains that would have responded with a decision. This has a tendency to reduce the gains that will not be accepted. Decision makers in a more positive risk conditions that do not like the decision not to reduce the risk of gains they already have. Other findings obtained in this study of the tendency of experimental participants to take less risky decisions when information is presented in a negative frame. The results are consistent with findings in the study Emby (1994) and Chang et al (2002) that a person who at the time that risk information is presented in a negative frame,

participants in this study chose to make a decision by the level of risk as small as possible. When they get information in a negative frame, the majority of participants tend to give advice or make investment decisions more secure form to sell or hold shares held. Participants do not give advice to buy stocks when information is presented in a negative frame.

Therefore, the implication of these findings is that investors need to pay attention to the framing effect with caution because a similar problem with a different frame may result in an upside-down option or a different choice. Beside, investors need to be encouraged to improve and develop the knowledge to reduce bias in decision making caused by the presence of framing in a single set of accounting information. In addition, because the accounting information published by public companies is of interest to users of such information, the accounting information submitted by the company should be able to form a positive value, regardless of the conditions being experienced by the company issuing the information.

#### **Additional Analysis**

As additional analysis, there is no significant difference between decision made by participant in responding value at risk and sensitivity analysis risk reports presented in loss-positive frame and gain-negative-frame. It is revealed in result of ANOVA with significance 0.679 and 0.559 (Table 5). It means that in the frame, participant is not influenced by risk report format.

Table 5 also shows that there is no significant difference between participants who escaped from the manipulation check process and have the demographics of college experience on the three courses/programs that followed (significance value above 0.05). This shows that the knowledge possessed by the participants has a relatively similar trend, so they are able to understand the hypothetical case presented in the experimental material

#### CONCLUSION, IMPLICATION, SUG-GESTION, AND LIMITATIONS

It can be generalize as the following. Obligations of the preparation of reports of risk are part of the policy guidelines of Financial Accounting Standards (SFAS) No. 60 of 2010 issued by the Financial Accounting Standards Board Indonesia Institute of Accountants (DSAK IAI) and effective from January 1, 2012. SFAS No. 60 adoption of International Financial Reporting Standards (IFRS) 7: Financial Instruments: Disclosures with some necessary modifications. GAAP requires that the banking company in Indonesia to prepare a report with the format of risk sensitivity analysis or value at risk.

Results showed that participants in this study chose to take action that is not at risk when information is presented in a positive frame. This is consistent with findings in the study Emby (1994) and Chang et al (2002). Information involves risks that are positive and will generate a certain level of gains that would have responded with a decision that has a tendency to reduce the gains that will not be accepted.

Decision makers in a more positive risk conditions do not like the decision to reduce the risk of gains they already have. The results are consistent with the results of the study Rajgopal, 1999; Roulstone, 1999; Linsmeier et al, 2002; Schrand, 1997 which stated that the report presented to the full risk of influencing the sensitivity of trading volume based on the level of stock market prices. Additional quantitative information also increases the confidence of participants in formulating investment decisions. Thus, the banking companies in Indonesia need to start presenting risk information in its financial statements. Complete presentation of risk information is to fulfill the obligations required by SFAS No. 60 and also aims to improve the assessment of the performance of the company by analysts and investors.

Investors need to pay attention to the framing effect with caution because a similar problem with a different frame may result in an upside-down option or a different choice.

Investors need to be encouraged to improve and develop the knowledge to reduce bias in decision making caused by the presence of framing in a single set of accounting information. In addition, because the accounting information published by public companies is the interest to users of the information, the accounting information submitted by the company should be able to form a positive value, regardless of the real conditions of the company.

However, future studies need to involve real investors to obtain a conclusion which is closer to reality. Beside, this study did not perform pre-test procedures to participant. This study only performs the procedure pilot experiment to test the instruments used in real experiments. Pre-test procedure should be performed for participants in subsequent experimental studies, in order to make more familiar with the presented material.

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