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REMINDER EFFECT AND ANCHORING-ADJUSTMENT IN EARNINGS ANNOUNCEMENT: IMPLEMENTATION OF PRIOR-PERIOD BENCHMARK DISCLOSURE STRATEGY[1]

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ABSTRACT

The purpose of this study is to provide empirical support regarding the reminder effects and anchoring-adjustment in earnings announcements. This study is important to explain the cognitive mechanism in processing the information that the consequences can affect the judgments of investors in evaluating company performance. The research of behavioral accounting often focuses on the consideration in the framework of investment decision-making mechanism based on a systematic and accurate. Prior researches have described strategic disclosure of prior-period benchmark in earnings announcement that focuses on the transitory gain or loss, which, in turn, influences investor's judgments (Schrand & Walther 2000; Krische 2005). Using strategic reference-point theory from psychology and Hogarth & Einhorn's (1992) belief-adjustment theory, this paper extends such research by investigating how investors behave differently to reminder effect and anchoring-adjustment. The experimental results suggest that reminder effects and anchoring of information can influences investor's judgments in evaluating of company performance.

Keywords: *reminder effect, anchoring-adjustment, cognitive mechanism, strategic reference-point theory, belief-adjustment theory*

INTRODUCTION

Research in the field of behavioral accounting, is generally related to the individual behavior by either accountant or non-accountant that is influenced by the function and report of accounting (Hofstedt & Kinard, 1970). This study is aimed at issues on how investors behave toward earnings announcement using disclosure strategy of prior-period benchmark. This strategy can result in reminder effect (Schrand & Walther, 2000; Krische, 2005) and anchoring-adjustment (Habbe, 2006) that can influence investor's judgment in evaluating the firm performance. This study aims to provide empirical support regarding the reminder effects and anchoring-adjustment bias upon the earnings announcement. This issue is quite interesting as it attempts to analyze investor's behavior not only based on the publicized accounting information but also

[1] We appreciate the constructive comments of participants at the 14th Accounting National Symposium, Universitas Syah Kuala, Banda Aceh and anonymous reviewers.

considering psychological factor (cognitive process) in relevance with reminder effect and anchoring-adjustment bias that can influence investors in evaluating the firm performance.

This study also employs strategic reference-point (Fiegenbaum *et al*. 1996) and belief-adjustment theory (Hogarth & Einhorn, 1992) in explaining the phenomenon of prior-period benchmark disclosure strategy. Strategic reference point is psychological theory saying that in a complex environment a decision maker tend to consider three major factors in making decisions, namely: internal, external and time-dimension (the past, now and the future) factors. This study gives stronger stress on the internal factor, and earnings announcement of prior-period profit/ loss transitory. Belief-adjustment (Hogarth & Einhorn, 1992) predicts that investors will tend to change his/her initial belief (anchor) and do adjustment for his decision based the consecutive available information of market. Furthermore, this study also employs prospect theory explaining that decision makers put into consideration and evaluate the information on loss and profit differently (Kahneman & Tversky, 1979).

This study is a development of the prior research done by Schrand & Walther (2000) and Krische (2005) on the examination of prior-period benchmark disclosure strategy in earnings announcement and a study carried out by Habbe (2006) about representativeness and anchoring adjustment. The examination of prior-period benchmark disclosure strategy in the announcement of current earnings period means that the decision of announcing is seen as a strategy. This means every item disclosed in the announcement of financial report will reflect its ability to influence the perception of readers in this respect the users of financial report like investors, creditors, government and society.

There are some reasons why this study is important to conduct. First, phenomena dealing with cognitive mechanism upon the occurrence of reminder effects and anchoring adjustment, involves psychological theory in analyzing the investor's behaviors. This examination can widen the horizon of behavioral aspect accounting; there fore it can explain why investors behave more/less favorable[2] in evaluating the firm performance (Schrand & Walther, 2000; Krische, 2005).

Secondly, issues on reminder effect and anchoring-adjustment in earnings announcement are important and interesting issues to observe. Because there have been still few studies that are relevant to such research and it should still require deeper explanation why and how reminder effects (Schrand & Walther, 2000; Krische, 2005) and anchoring-adjustment bias (Tversky & Kahneman, 1974; Habbe, 2006) can influence investors in evaluating the firm's performance.

Third, this study examines the theory of strategic reference point (Fiegenbaum *et al*. 1996) of psychology and theory of belief-adjustment (Hogarth & Einhorn, 1992), focusing on the prior-period benchmark disclosure strategy in earnings announcement. This study attempts to explain why investors evaluate the firm performance differently toward the received information. Furthermore, this study describes phenomena of processing bias of reminder effects and anchoring-adjustment, which are believed to give influence on the process of the firm performance evaluation. This study is designed employing approach of experiment and contribution as it is expected to strengthen empirical support regarding the reminder effects and anchoring-adjustment bias.

Schrand & Walther (2000) explain that investor more often remembers the prior-period earnings that that of loss condition, resulting in the inclination of current perform-

[2] More/less favorable is the tendency of the decision makers to give scoring value unconsciously that is less beneficial for earnings disclosure in evaluating the firm performance. This term is adopted from the study by Schrand and Walther (2000) and Krische (2005).

ance evaluation to be a lower reference point, the presence of relatively growing earning rise that can improve the perception of the firm's performance. In their study, they state that managers strategically disclose prior-period benchmark in the current earnings announcement that subsequently will influence investors' judgment. This finding is supported by Krische (2005) with his experiment outcome indicating that the presence of quantitative description of transitory profit or loss of the prior period in the current earnings announcement can be much of help for the investors in evaluating the firm's performance.

Based on the previous theory and empirical support, the subsequent question is whether reminder effect and anchoring-adjustment bias in earnings announcement can influence the investors in evaluating the firm's performance. This question has become quite interesting issue to observe because it necessitates more detailed explanation and larger empirical supports.

Participants, as investors in this experiment are students of Magister Science and doctoral program of UGM. They are asked to interpret a firm's earnings announcement and to forecast the future period earnings. There are five stages in experiment design (Krische, 2005) namely: first, manipulated between subjects, investors receive earnings announcement of the prior period and are asked to identify the amount of gain or loss. The second, investors receive the firm's business description to explain the natural occurrences before investors receive the following announcement regarding the prior-period benchmark disclosure. The third, presenting reiteration of last year's profit in the current year announcement, which consists of three levels namely, profit, profit plus description, and adjusted profit plus description. The fourth, employing within subject intended to examine whether the investors will change their estimation, when they reexamine the announcement with different contents among the current profit and the current profit plus historical profit. The fifth, this experiment is ended with pos-task questionnaire.

Consistent with Schrand & Walther (2000) and Krische (2005), the result indicates that investors evaluate the firm's performance better when the information of prior-period transitory profit that is used as benchmark or the initial value disclosed in the earnings announce of current-period profit, and conversely upon the transitory loss of prior-period, investors are inclined to evaluate performance worse. This finding is also in compliance with the one predicted, that is, the presence of reminder effects and anchor for information with positive content (profit) causes investors to give better scoring value, while information with negative content (loss) causes investors to give worse scoring value in the process of evaluating the firm's performance.

This study is organized in three sections. The first section is started with introduction. The second, it explains the theoretical base and Hypothesis development. The third and fourth section describes the experiment method and the result. The fifth elaborates the discussion of this research result and exposes the shortcomings of this research and suggestions for future research.

THEORETICAL BASE AND HYPOTHESIS DEVELOPMENT

1. Cognitive Mechanism and Judgment Bias

Cognitive mechanism is a process of decision-making that involves judgment and that is based on systematic and accurate stages. The process of decision-making is based on cognitive aspects that cover: defining problems, identifying criteria, choosing several relevant alternatives, alternative ranking and decision-making. However, individuals have the nature of bounded rationality that is; individual condition of owning limited information, time, and memory capacity and so on so forth, so generally judgment upon the process of decision-making is based on heuristic strategy (Bazerman, 1994). Heuristic strategy is prone to result in bias among others it is due to order effect (Hartono, 2004; Nasution and Supriyadi, 2007), and to bring about representative bias and anchoring-adjustment (Tversky and Kahnerman, 1974; Habbe, 2006).

- Reminder Effects

Reminder effects explain how individual reacts against the information that contains prior-period occurrences. Schrand and Walther (2000) who are supported by Krische (2005) examine reminder effect using two factors: a) the availability of prior-period occurrences in the work memory and b) the integration of prior-period occurrence settled in the profit benchmark. It biases because reminder effect can take place when information of prior-period occurrences is disclosed in the current announcement, so it will reminds customers more about such occurrences. Assumption that underlies this processing bias is bounded rationality (Bazerman, 1994), namely, the individual condition with limited information, time, memory capacity and etcetera, so the prior-period occurrences will naturally be forgotten by the investors, except that the information is disclosed in the current announcement. Whereas with the availability of enough information, it is believed that the investors will have more comprehensive and better judgment that will result in the better quality of judgment in the process of evaluating performance.

- Anchoring-adjustment

Tverskky and Kahneman (1974) explains that on many situations individual makes estimation starting from initial value (anchor) , which is later adjusted with the final result (adjustment). The initial value or starting point may be based on the problem formulation or perhaps derive from the calculation. Individual has several reference points on their mind, for example the previous share price, the previous gain/loss, ROE, PER and etcetera. The different starting point also will bring about different estimation.

Researches on anchor have been done much, among others; in the field of auditing focused on how auditor biases his decision due to the anchor on their mind. Hartono (2004) examines heuristic anchoring towards the changing investors' belief upon the condition of timing and order in the announcement of dividend and profit. Habbe (2006) observes representativeness and anchoring-adjustment bias. However, researches on anchor in the finance and accounting field are far too limited and necessarily to be developed.

2. Hypothesis Development

- Reminder Effects towards Investors' Reaction

The finding of Schrand & Walther (2000) indicates that managers strategically select the amount of prior-period profit in quarterly earnings announcement and managers would prefer to announce prior-period profit separately from the sale of property, plant, and equipment than suffering loss. This result is consistent with Krische (2005) stating that the strategy of prior-period benchmark disclosure in the announcement of effective profit helps investors in evaluating the firm's announcement due to the processing bias. This processing bias can occur because of the information disclosure of prior-period transitory gain/loss in the current announcement that can form initial belief (anchor) and can remind the previous occurrence called reminder effects.

The presence of reminder effects psychologically will influence cognitive mechanism and judgment process that can result in the investor's more/less-favorable behavior in evaluating the firm's performance. Reminder effect can occur when information on prior-period occurrence is disclosed in the current announcement, so it will remind the investors more about such occurrence. Assumption that underlies this phenomena is the presence of bounded rationality (Bazerman, 1994), so that the prior-period occurrence will naturally be forgotten by the investors, except when the information is disclosed in the current announcement. Meanwhile with the prior-period transitory gain/loss used as anchor, it is believed that the investors will have initial belief foundation in scoring the future.

The phenomena of reminder effect and anchoring-adjustment can also be explained with prospect theory. Kahneman & Tversky (1979) explain that framing can influence individual to admit the presence of losses and gains differently. The important factor that underlies framing effect is when a loss is valued more devastating than gain that is valued more gratifying. This means that individual is inclined to turn down risk when it is stated in positive frame, but will take risk in the negative frame statement. Schrand & Walther (2000) affirm that investors more often remember prior-period transitory profit than loss condition. Thus, if associated with the bias phenomena due to reminder effects, investors will process prior-period information disclosed in the current announcement differently between gain and loss, and transitory profit information is believed to tend to urge investors' more favorable behavior whereas transitory loss information is inclined to urge investors' less favorable in evaluating performance.

Gul (1984) in psychology and accounting research explains that the different personality and cognitive styles will influence the individual's information processing that bring about the different evaluation of the firm's performance. This study gives stronger stress on the processing bias due to reminder effects (Schrand & Walther, 2000; Krische, 2005) in employing the strategy of prior-period benchmark disclosure that is revealed in the current announcement. The following is the hypothetic formulation:

H1a: Reminder effect occurs in the evaluation of the firm's performance when prior-period transitory gain/loss is disclosed in the current announcement.

H1b: The different evaluation of performance occurs when prior-period transitory gain/profit is disclosed in the current announcement with prior-period transitory loss.

Cognitive Mechanism Associated with Investors' Judgment

- Availability

Prior-period gain/profit in general is revealed in the current earnings announcement, but the specification for additional information on prior-period gain/loss is the policy of the manager. Without mentioning the prior-period occurrence in the current announcement, investors have to reopen transitory gain or loss of old memory to calculate the adjusted gain (Moeckel, 1990). The necessity to integrate takes place only if current gain or loss and prior-period transitory gain or losses are simultaneously available in working memory that can foster the investors' judgment.

Availability that is deduced from this heuristic concept (Kahneman & Tversky, 1979) perceives that individual is inclined to make decision based on the available information in the memory. Moreover, generally, information available in an individual's memory is the outstanding, or the most-frequently exposed one. Based on this assumption, it can be explained that the quantitative description of prior-period gain or loss exposed in the current earnings announcement will secure investors to have sufficient information in their memory and can be of much help for individual in calculating the adjusted profit (Krische, 2005). Based on prospect theory (Kahneman & Tversky, 1979), investors will adjust more frequent gain than loss condition when transitory gain or loss of prior period is revealed in clearly, quantitatively description, so it will lessen the necessity to reopen the long-term memory (Schrand & Walther, 2000).

H2a: Reminder Effect occurs in evaluating the firm's performance when the qualitative description of prior-period transitory gain/loss is disclosed in the current announcement.

H2b: Different evaluation of performance occurs when qualitative description of prior-period transitory gain/loss is disclosed in the current announcement with transitory loss of prior period.

- Integration

Although the availability of working paper memory (working memory) of prior-period gain/loss may be a required condition, this is not enough to influence the investors' judgment. A less knowledgeable decision maker to integrate the disclosed information will use information as an explicitly presented thing (Dietrich *et al*. 2001). It is based on bounded rationality, a condition of an individual that owns limited information, time and memory capacity and etcetera (Bazerman, 1994).

Upon the process of decision-making, a clearness of quantitative description of prior period occurrence information disclosed explicitly is not sufficient to help investors as reference point. But, what helps investors more is the amount of adjusted earnngs by calculating the amount of prior-period transitory gain or loss or the current gain or loss (Schrand & Walther, 2000; Krische, 2005). That is why; hypothesis can be formulated as follows:

H3a: Reminder effect in the evaluation of the firm's performance occurs when prior-period transitory gain or loss and adjusted profit is explicitly disclosed in the current announcement.

H3b: Different evaluation of performance occurs when the prior-period transitory gain and adjusted profit is explicitly disclosed in the current announcement with prior-period transitory loss.

- Anchoring-adjusment.

Anchoring-adjustment is individual's tendency to make estimation starting from initial value (anchor), that is then adjusted (adjustment) with the new information (Tversky & Kahneman, 1974). In security market, investors are prone to predicting the share price based on the previous share price, to predicting ROE with previous ROE. Shiller (2000) explains that in the absence of better information, the previous price is determinant to the current price. This inclination of investors to use this anchor strengthens the equality of share price from day to the next day.

In this study, the presence of anchoring-adjustment bias is experimented with a strategy of prior-period benchmark disclosure based on the consideration of internal factor, that is, prior-period transitory gain (Schrand & Walther, 2000; Krische, 2005). It is based on the strategic reference point theory of psychology explaining that in complex environment decision makers are prone to considering three major factors to make decision, namely internal, external, and time dimension factors (past, present and future). In this research, the internal factor upon the earnings announcement, which is prior-period transitory gain or loss, is given more stress. Information on the prior-period transitory gain or loss is then disclosed in the announcement of current period as a benchmark.

Besides that, in accordance with prospect theory, decision makers consider and evaluate information differently between gain and loss (Kahneman & Tversky, 1979). Prospect theory states that gain and loss are separately evaluated relative to the neutral reference point. Reference point is a status quo that an individual has been accustomed to and in general is influenced by cultural norms, expectation and individual level. Prospect theory predicts that individual will avoid risks (risk averse) upon evaluating choices above reference point (profit domain) and is prone to takes risk (risk seeking) upon evaluating choices below reference point (loss domain). The following is the formulation of hypothesis:

H4: When prior-period transitory gain/loss is disclosed in the current announcement, investors will evaluate the firm performance better/ worse than the current gain.

Inference and Correction

Hogart & Einhorn (1992) explain that belief-adjustment theory using the approach of anchoring and adjustment. This theory explains the phenomena of order effect that emerges form the interaction between information processing and duty characteristic. Bazerman (1994) pointed out that belief-adjustment model is one of heuristic biases. This model is based on the assumption that individual processes information consecutively and has limited memory. Individuals will tend to change his initial anchoring and to do adjustment on his decision based on the availability of consecutive information of the market.

In reminder effect phenomena, belief-adjustment model is based on the assumption that the presence of bounded rationality of an individual will naturally make the information of prior-period transitory gain or loss forgotten, except when such information is disclosed in the announcement of current period. There fore, it is believed that the investors will change his/her belief upon receiving the announcement of gain whose contents are different between that with current period disclosure and that with current gain disclosure plus a copy of duplication of prior period (Krische, 2005). Three levels of the current announcement covers gain, gain plus description, adjusted gain plus description (Krische, 2005). The formulation of hypothesis is stated as follows:

H5: After reexamining the current gain announcement, investors will revise his/her evaluation to reduce the difference between the initial influence and prior-period transitory gain/loss repeated in the current period announcement.

RESEARCH METHOD

Experimental design of this study covers five stages developed from Krische (2005) that is, first, with between subject manipulation, using the same firm and financial data, investors receive last year announcement but the prior-period information varies between gain and loss. Investors are asked to identify the amount of gain or loss in order to verify that they previously have known the required information to adjust the occurrence when asked to forecast. Secondly, investors are to explain the description of the firm business to explain the prevailing natural occurrence before they receive the next announcement in relevance with the strategy of prior-period benchmark.

The third, investors are to examine reminder effects and anchoring adjustment in the strategy of prior-period benchmark presented in the current year announcement with various information components consisting of three levels of information i.e., the disclosure of profit information, profit plus description and adjusted profit plus description. The fourth, they are to employ within subject at the aim of examining whether investors change their estimation upon reexamining the different announcement that is, the current period announcement and the current earnings announcement plus duplication of prior-period gain.

This experiment ends in post-task questionnaire designed to help (them) evaluate whether revision of the investors' forecast is due to the different perception on the prior-period occurrence or to the different way of comprehending accounting information.

Dependent Variable

In this experiment, the dependent variable is investors' evaluation toward the firm performance measured through forecast. Investors interpret the current earnings announcement and forecast the next year earnings. The next earning forecast is used as the measurement of the investors' evaluation toward the firm's performance; because the future profit and the growing future profit are important components of determining value (Feltham & Ohlson 1995; Ohlson 1995).

Independent Variable

The independent variable in this study is treatment factor. This experiment uses mixed design 2x3x2 that covers the disclosure of prior-period earnings (two conditions: gain-loss, reiteration of prior earnings in the current announcement that consists of three levels (profit, profit plus description, and adjusted profit plus description), and repeats the announcement with different spectrum of current period and current period plus copied duplicate of prior-period earnings. The first investors receive last year's full disclosure announcement of prior-period transitory gain/loss (property debate), of manipulation between subject toward gain/loss condition. After explaining the description of the firm business, investors receive the current year announcement, and manipulation between subject to repeat the prior-period information on three levels namely; earnings, earnings plus description and adjusted earnings plus description.

Subsequently, using within subject is meant to manipulate if investors access last years announcement upon forecasting. The first, investors are prevented from the repetition of the prior-period announcement. Somehow, after reporting the initial earning forecast, investors are given copy of the current announcement duplicate and that of the prior period, and then they are asked to forecast the earnings once more for the upcoming year.

Experimental Subject

Investors as the subjects of this experiment are students of Magister Science (M.Si) and doctoral program of University of Gadjah Mada who are taking and have taken financial management and or stock market subjects. The reason why university students are chosen as participant is to ensure that experimental subjects have the minimum required knowledge to evaluate the firm performance. Besides that, the case of experiment in this study requires the basic knowledge, not experience.

Experimental Procedure

Every investor is provided with a package containing written instruction and material case developed from the study of Krische (2005). All the investors have access to calculator. There are five stages in this experiment, which are explained in figure 1. They cover; the stage of check manipulation, the stage of business description explanation, the stage of initial forecasting, and the stage of forecast revision and ended with post-task questionnaire designed to help find out whether the difference in the investors' forecasting revision is due to; 1). The investors' different perception on the prior-period occurrence, or 2) The investors' different comprehension of the accounting information and their different ability to calculate the adjusted earnings. The question is also associated with demographic information.

Data Analysis Technique and Hypothetic Experiment

The data analysis technique employed in this experiment is analysis of variance (ANOVA) to analyze the whole prior-period gain or loss occurrence and to explain the investors' forecast (initial and revised) in relevance with the prior-period information in the current announcement. Before the hypothetic experiment, first the reliability test of Cronbach Alpha and instrument validity test using factor analysis method are carried out especially related to the post-test questions about the perception of occurrence, strategic awareness and accounting knowledge.

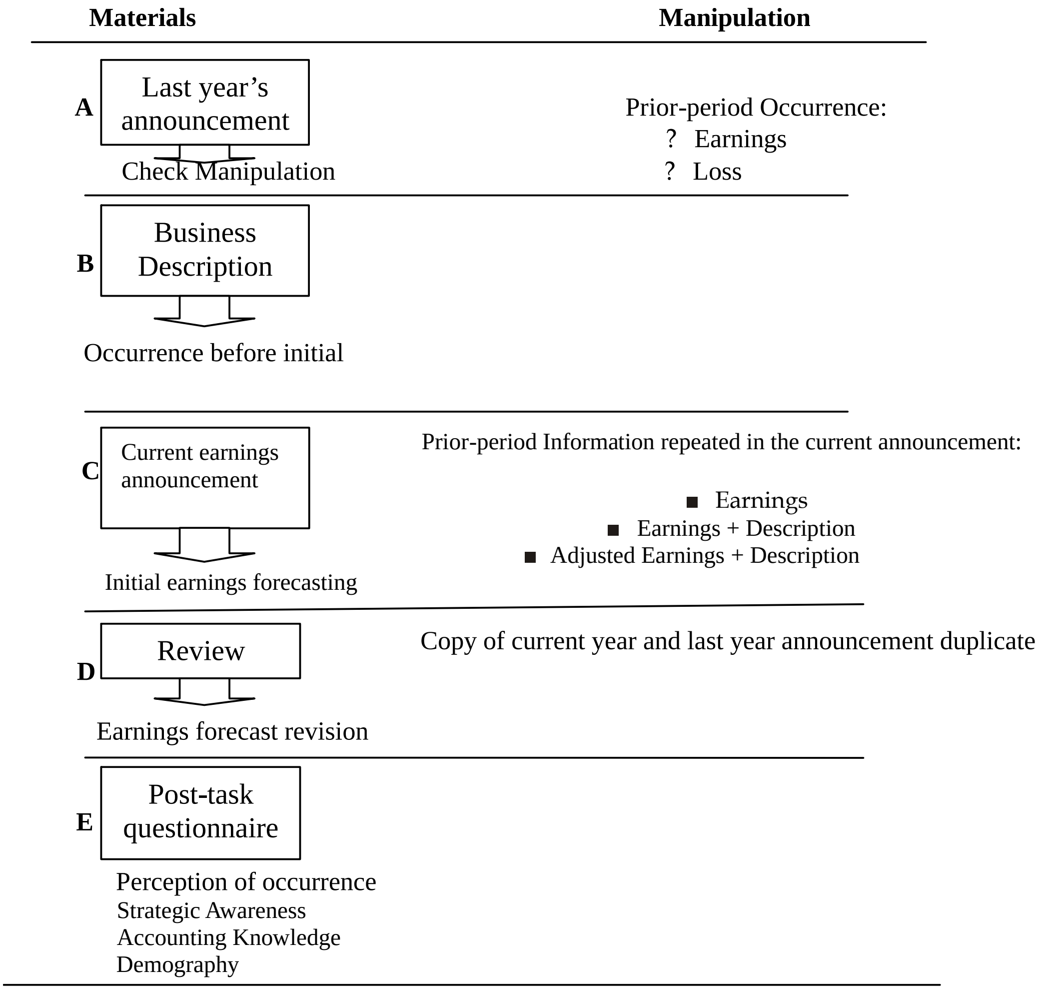


Figure 1. Experimental Manipulation and Material

THE RESEARCH OUTCOME

Data Characteristic and Subject Demography

Subjects are 33 students of M.Si and doctoral program of UGM who consist of 10 males and 23 females. The average age of the subjects is 28 years, at the average, as students and lecturers who are experienced more than 5 years. Out of the 33 participants, 3 can not be analyzed as having a very extreme amount of earnings forecast. Participants are classified at random into eight groups as the following (table 1).

Manipulation Check

Manipulation check is carried out at the first stage, namely identifying occurrence and the amount of gain or loss in order to verify whether participants previously have known the required information in adjusting transitory gain or loss upon being asked to make forecast. This selection of subjects is different from the outcome of Krische study (2005), stating that most subjects are identified to understand a little about the required information to forecast gain. It can be proven by the fact that almost 40% of whom make mistake in interpreting and identifying transitory gain or loss for property finishing. The selection of M.Si and doctoral program students as subject is far from representing the fact that they have enough knowledge to forecast gain, so it is necessary for them to join a special training or pre-test before going into the stage of manipulation check.

Preliminary Analysis

Before investigating the hypothesis specifically, this study applies the model of 2x3x2 mixed design with analysis of variance (ANOVA) to examine the whole effect of the prior-period occurrence (gain or loss) and the repetition of the prior-period information in the current announcement (earnings, earnings + description, and adjusted earnings + description) on the investors' forecast (initial and revised). ANOVA analysis is obtained from the outcome: Between-Groups Initial (F=3,206; Sig.=0,010) and Between-Group Revision (F=2,803; Sig.=0,020). The samples of this study belong to small samples so that to analyze it, it uses non-parametric test by ranking initial and revised forecast (Kachelmeier and Messier, 1990). Besides, it carries out equality of variance or the-so called homogeneity of variance as one of ANOVA assumptions, that is, dependent variable must have the same variant in every independent variables. The homogeneity of variance test using Levine's test of equality of error variance indicates that the absence of difference between experimental group (Initial: F=1,240; p>0, 05; p=0,308; Revised: F=2,082; p>0, 05; p=0,072).

Table 2 shows mean (average), median and mean ranked of gain forecast for 2x3x2 mixed design. The descriptive statistic of dependent and independent variables is explained on table 2 as the following.

The average Rank of Investors' Gain Forecast for prior-period gain/loss condition is presented graphically in the following figure 2 and 3.

Table 1. Descriptive Statistic of Participant Category

Transitory group	Earnings	Earnings+ Description	Adjusted earnings +Description	Total
Gain	5	5	5	15
Loss	3	5	7	15
Total	8	10	12	30

Table 2. Investors' Forecast of Gain

Panel A: The Average of Investors' Forecast of Gain (Standard Deviation)

Transitory of prior period	Forecast	Earnings	Earnings+ Description	Adjusted Earnings +Description
Gain	Initial	570.800 (124.7)	494.600 (86.2)	614.006 (234.4)
	Revised	614.600 (107.9)	494.600 (86.2)	668.646 (269.6)
Loss	Initial	678.580 (109.7)	525.638 (54.6)	404.571 (103.6)
	Revised	645.846 (164.0)	577.638 (118.3)	448.846 (110.5)

Panel B: The Median of Investors' Forecast of Gain (Interquartile Range)

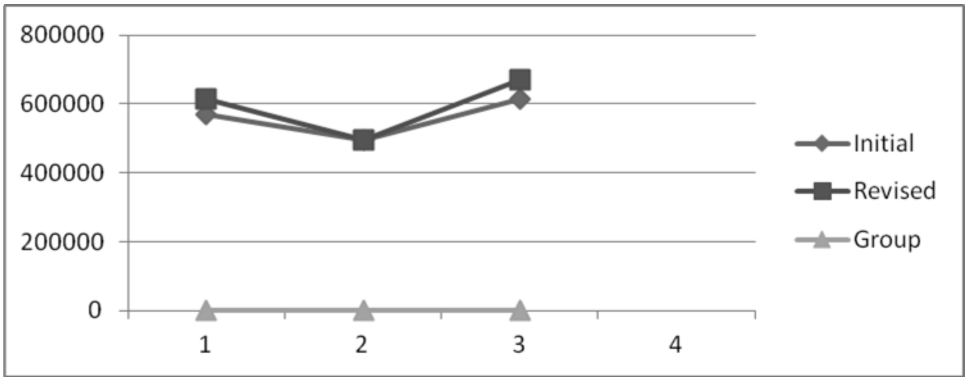
Transitory of prior-period	Forecast	Earnings	Earnings+ Description	Adjusted Earnings +Description
Gain	Initial	530000 (199000)	460000 (148500)	631230 (369400)
	Revised	550000 (190500)	460000 (148500)	631230 (505000)
Loss	Initial	700000 (-)	491000 (86597)	458000 (142000)
	Revised	700000 (-)	539194 (192500)	491000 (36928)

Panel C: The Average Rank of Investors' Gain Forecast

Transitory of prior-period	Forecast	Earnings	Earnings + Description	Adjusted Earnings + Description
Gain	Initial	23.10	15.70	27.40
	Revised	27.60	13.40	28.10
Loss	Initial	33.67	20.60	7.64
	Revised	26.67	22.40	11.64

Figure 2.

Panel A: The Average of Investors' Initial and Revised Forecast of Gain for Prior-Period Gain Condition



Panel B: The Average of Investors' Initial and Revised Forecast of Gain for Prior-Period Loss Condition

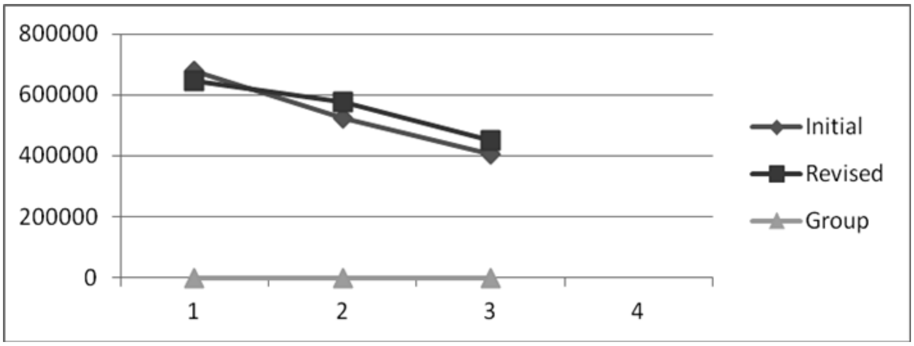
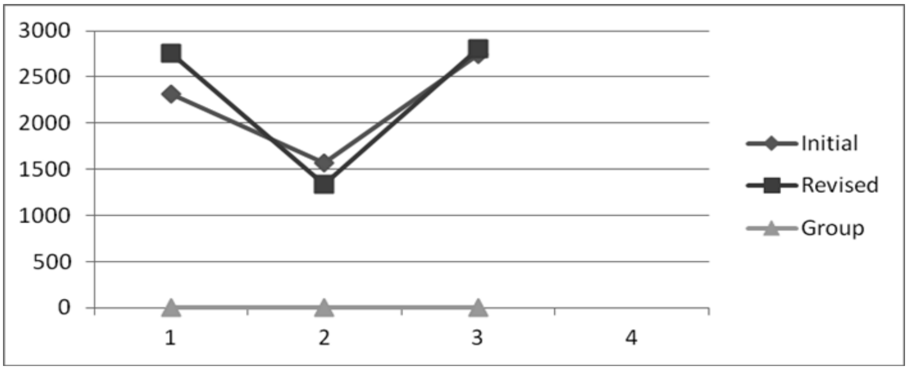
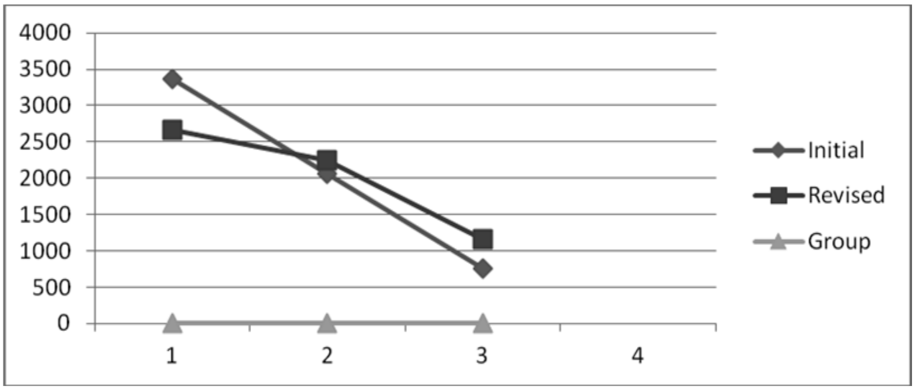


Figure 3.

Panel A: the Average of Investor's Initial and Revised Forecast of Gain for Prior-Period Gain Condition



Panel B: The Average Rank of Investors' Initial and Revised Forecast of Gain for Prior-Period Loss Condition



Hypothetic Experiment

- Reminder Effect on the Prior-Period Gain and Loss (H1)

H1a examines whether reminder effects take place in evaluating the firm's performance when prior-period transitory gain/loss is disclosed upon the current disclosure and investors are expected to forecast the future gain higher than the current one when prior-period transitory gain is disclosed upon the current announcement and lower for prior-period transitory loss. Consistent with H1a, the investors' forecast is at the average higher on the condition of prior-period transitory gain disclosed upon the current announcement (the presence of reminder effect) than the current gain. Conversely, the average of the investors' forecast is lower than the current gain, when the prior-period transitory loss is disclosed upon the current announcement. So is H1b, the amount of the investors is different between gain and loss, the amount of loss s bigger than that of gain.

- The Availability of Information (H2)

Inconsistent with H2a, the average of the investors' forecast is higher than the current gain, when the description of prior-period transitory gain is disclosed upon the current announcement, but the amount of investors' forecast of gain is lower than the one predicted in H1a. The inconsistency of this result is due to the investors' poor comprehension in interpreting transitory gain or loss of the prior period and in calculating the adjusted earnings. This is supported by the fact that almost 40% of the participants cannot identify transitory gain or loss of the prior period accurately.

Meanwhile for loss, consistent with the one hypothesized; the average of investors' forecast is smaller when the quantitative description of the prior-period transitory loss is disclosed upon the current announcement. For H2b, consistent with the prospect theory that the amount of loss is bigger that that of gain. This can be seen from the investors' average forecast on a condition of gain plus description that is lower than the current gain now.

- Integration (H3)

Consistent with H3a that reminder effect takes place when the prior-period transitory gain/loss and adjusted earnings are explicitly disclosed upon the current announcement. So is H3b that the difference takes place between the prior-period transitory gain and adjusted earnings that are explicitly disclosed upon the current announcement with prior-period transitory loss. This can be shown by the amount of the investors' average forecast of loss benchmark that is bigger than gain benchmark.

- Anchoring-adjustment (H4)

Consistent with H4, when the prior-period transitory gain is disclosed upon the current announcement, investors evaluate the firm's performance better, whereas upon the prior-period transitory loss, they evaluate it worse. This means that with prior-period transitory gain disclosed upon the current announcement, investors have initial value (anchor) to make forecast of the future gain. If the initial value is positive (gain), investors are inclined to evaluate the performance better than the current gain, whereas if the initial value is negative (loss), they are prone to evaluating the performance worse than the current gain.

- Inference and Correction (H5)

H5 examines whether investors revise their forecast after reexamining the earnings announcement in which the current gain and the current gain + last year's gain are differentiated. This study finds out that investors significantly revise their forecast. Especially, investors enhance their forecast upon the reexamination. This study outcome indicates that investors revise their forecast better when there is information on prior-period transitory gain upon the current announcement. In contrast, investors revise their forecast worse when the prior-period transitory loss is exposed upon the current announcement, and the amount of the forecasted gain is smaller for disclosure of gain benchmark than that of loss benchmark.

- Additional Analysis

The investors' forecast revision in this study is more because of the support of relevant information provision about the transitory prior-period gain. This indicates the presence of reminder effect and anchoring-adjustment upon the earnings announcement, which are explained through the higher or lower average of investors' forecast of gain upon the gain/loss benchmark. Besides that, through the business description and post-task questionnaire it can be explained that at the average investors have insufficient comprehension to identify prior-period transitory gain or loss as important factor to make forecast of gain and to calculate adjusted earnings, so the strategy of prior-period benchmark disclosure still requires a better comprehension of the investors. However, as pilot research, this study gives support that in the process of decision-making investors consider the available relevant information upon the earnings announcement that is internal factor, a prior-period transitory gain or loss. Furthermore, investors evaluate performance better by using strategic benchmark because they feel being reminded about relevant occurrence that took place in the past.

CONCLUSION, SHORTCOMINGS AND DISCUSSION

This study is aimed at giving empirical support to the presence of reminder and anchoring-adjustment in using prior-period benchmark, as well as to the explanation of cognitive mechanism in processing information, which consequently can influence investors' judgment in evaluating the firm's performance. This study develops the previous researches done by Schrand and Walther (2000), Krische (2005) about the examination of strategy of prior-period benchmark disclosure. The result complies with the fact that the strategy of prior-period benchmark disclosure upon the earnings announcement upon the earnings announcement can bring about reminder effect and anchoring-adjustment that can influence the investors' behavior in evaluating the firm's performance. Gain benchmark causes the evaluation of performance better meanwhile loss benchmark causes the evaluation of performance worse.

Other than small sample that amounts 30 experimental subjects, this study have several shortcomings, among others: it has not yet considered other aspects of psychology like the psychological difference and cognitive style. It is because upon manipulation check it identifies a relatively low comprehension of the investors about gain forecast so that bias in evaluating the firm's performance is suspected to arise because of the investors' low comprehension, not because of the individual's psychological difference and cognitive style. For further development of this study, it is necessary for the investors to join training before the manipulation check. Furthermore, perhaps it is also necessary to classify the investors into highly knowledgeable and lowly knowledgeable category that is potentially suspected to contribute to the different evaluation.

Some possibilities for future research development is the consideration of relevant information either internal, external or time dimension that are oriented to the past, present and future like that of management gain forecast (guidance management). Libby *et al.* (2006) and Han and Tan (2007) recommend the use of strategic multiple benchmarks disclosure, which is believed to be able to give a better quality of judgment.

Baginski *et al.* (2004), Pownall & Waymire (1989), Ajinkya & Gift (1984) explain the importance of management gain forecast that has prediction content. To elevate the internal and external validity of experimental setting, it is necessary to give consideration on other effects: history, maturity, testing, instrumentation and selection (Cooper & Schindler, 2006).

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