The Influences Of Status Quo And Endowment Biases On Earnings Management

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Abstract. This study investigates the effects of status quo and endowment biases on earnings management behaviors. This research conducts a survey method in 2018. The sample comprises of 74 accounting students at a business school in Indonesia. The main variables are measured by questionnaires with 1 to 7 scale. The hypotheses are examined by multiple regression technique. The findings reveal that status quo and endowment biases positively influence earnings management actions. This research provides two contributions. This study attempts to link status quo and endowment biases to earnings management behaviors. This contributes additional theoretical explanations of earnings management behaviors among accountants. Research conclusions can be utilized to determine the suitable psychological aspects of accountants for earnings management decisions.

Keywords: Status Quo bias, Endowment Bias, Earnings Management, Agency Theory, Transaction Cost Theory
Introduction

Studies which connect human psychological characteristics to earnings management behavior are still rare. Most studies of earnings management actions examine the link between financial factors and behavior of earnings management actions, for example, (Gopalakrishnan, 1994), Burgstahler & Dichev (1997), and Kurdi (2010). There is a shortage of accounting research which investigates the role of human psychological characteristics on earnings management. This research purpose is to fill the literature gap. Therefore, it is very interesting to investigate the impacts of the accountants’ psychological factors on earnings management behaviors.

Accountants psychological characteristics can influence their practical accounting decision. There is a practical gap here. Owners or top management have questions what the accountants’ psychological factors which affect a certain accounting decision. For example, when top management decide that earnings management is an unethical behavior what the psychological characteristics which appropriate. This study attempts to fill this practical gap.

This research utilizes agency theory, cost transaction theory, and a premise about human psychological factors for developing hypotheses. Specially, for the premise, it is believed that the beliefs, values, drives of people are the important variables of their behaviors. This school of thought emphasizes on human psychological variables. They are status quo and endowment biases. These psychological variables are predicted will influence accountants in making accounting decisions. Consequently, it is very interesting to obtain the answers of the research problem, namely, whether status quo and endowment biases influence earnings management actions.

A survey method is employed in this study. The questionnaires are developed for measuring status quo bias, endowment bias, and earnings management variables. A descriptive analysis is conducted to describe human psychological characteristic variables of respondents and earnings management behaviors. The instruments are provided to 74 accounting students as the research sample. Multiple regression technique is done to examine the hypotheses. Data analysis results show that status quo bias and endowment bias positively influence income increasing earnings management. These are evidence that agency and transaction cost theories can be utilized to predict the impacts of status quo bias and endowment bias on profits increasing earnings management behaviors.

This research contributes to connect status quo bias and endowment bias to earnings management behaviors among accountants. This study tries to give novel theoretical explanations of earnings management behaviors. Conclusions of this study can be utilized to determine the suitable human psychological variables of accountants in making accounting policies.

The rest of this paper is managed as follows. The following section reveals the literature review of agency theory and transaction cost theory, earnings management, status quo bias, endowment effect, and some research hypotheses development. The third section explains about research methods which are conducted. The fourth section indicates the results of data analysis. The final section reports the conclusions, limitations, and implications of study.
Literature Review And Hypothesis Development

Agency Theory
An agency contact is an agreement between an agent and a principal in which the agent provides services to the principal, and the principal delegates some authorities of decision making to the agent (Jensen & Meckling, 1976). In an employment agreement, the agents are the accountants, and the principals are shareholders. Agency theory has an assumption that individuals are self-interest (Eisenhardt, 1989). It is concluded that accountants will do opportunistic behavior to increase their fortune.

Transaction Cost Theory
Transaction cost theory explains that managers conduct income increasing earnings management to reduce costs of transaction (Burgstahler & Dichev, 1997). Theory of transaction costs assumes that company accounting profits have an impact on term of transaction between the company and its stakeholders. Transaction terms are more favorable for companies with higher profits, rather than lower profits companies. Accountants tend to report higher accounting earnings to get favorable transaction terms or to reduce transaction costs.

Earnings Management
Scott (2012) mentioned that behavior of earnings management is the choices by managers of accounting techniques or methods and real activities which influence accounting some specific reporting earnings objectives. Earnings management can be done by changing accrual estimations, accounting methods, and real actions manipulation by managers, for examples, inventory method change (Gopalakrishnan, 1994), fixed assets useful life estimation revise (Kurdi, 2010), and sales price reductions (Jackson & Wilcox, 2000). Furthermore, there are two objectives to conduct earnings management, namely opportunistic and efficient contracting objectives (Holthausen, 1990). Belski et al. (2008) found that the respondents judge that opportunistic earnings management is less ethical than efficient contracting earnings management behaviors.

Status Quo Bias
Bias of status quo works in persons who prefer for everything to remain relatively the unchanged (Pompan, 2006). Loss aversion causes bias of status quo (Samuelson & Zeckhauser, 1988). Loss aversion describes a human psychological characteristic which can exist in people decision-making process (Kahneman & Tversky, 1979). Loss aversion means that losses loom bigger than gains. Status quo bias is caused by loss aversion because small losses of alteration from current situation can be considered as bigger than they really are (Kim & Kankanhalli, 2009). Status quo bias induces people to avoid loss situation. Burmeister & Schade (2007) discovered that entrepreneurs are affected by the status quo bias but less affected than bankers and they did not significantly differ from students. Furthermore, Ryzhkov (2013) found that status quo bias positively affects the retention of customers. Dydland & Nilsen (2015) discovered that both status quo bias and affective loyalty had a strong and significant influences on intention of customers to stay with their current bank. Based on these findings, it
can be analogized that accountants with high status quo bias tend to avoid losses by doing income increasing earnings management. A synthesis of agency theory, transaction cost theory, and status quo bias are held to develop a hypothesis. Agency theory predicts that accountants conduct income increasing earnings management for opportunistic intention (Eisenhardt, 1989). Transaction cost theory explains that accountants will do income increasing earnings management (Burgstahler & Dichev, 1997). These theories derive income increasing earnings management variable. Furthermore, it is deducted that an accountant with high status quo bias will do earnings management practices. The developed hypothesis is as follow:

**H1: Status quo bias positively influences income increasing earnings management.**

**Endowment Bias**

The endowment effect portrays the fact that persons require much more to give up a thing than they are willing to spend to get it (Thaler, 1980). Konstantinidis et al. (2019) found that certified executives’ investment decisions and choices were affected by their endowment bias. Gawrońska (2017) discovered that participants experience endowment effect for branded, private, and fast-moving consumer goods. Furthermore, loss aversion results in endowment bias (Kahneman et al., 1991). Accountants with high endowment bias do not want to be losers. An accounting earnings decreasing will reduce their reputation. This reputation decreasing looms larger than it is. They will do income increasing earnings management to avoid reputation loss. A synthesis among agency theory, transaction cost theory, and endowment bias are conducted to derive a hypothesis. Agency theory portends that accountants will do income increasing earnings management for opportunistic intention (Eisenhardt, 1989). Transaction cost theory illustrates that accountants hold income increasing earnings management to get lower transaction costs (Burgstahler & Dichev, 1997) The two theories derive income increasing earnings management variable. Accordingly, it is presumed that an accountant with high endowment bias will do earnings management behaviors. The developed hypothesis is as follow:

**H2: Endowment bias positively influences income increasing earnings management.**

**Research Methodology**

**Sampling Design**

Respondents in this research are 74 accounting students at a school of business in Indonesia. Accounting students are sufficient surrogates for professional and non-professional populations in many designs of decision-making research (Houghton & Hronsky, 1993; Locke et al., 2015). The respondents consist of accounting students of undergraduate and graduate degrees, and accounting profession education program. This research gives the questionnaires to accounting students who taking or have passed accounting theory subject, so that they have good understanding of earnings management behaviors. Respondents are voluntary and the responses to questions are anonymous. There is no grade and no monetary incentives for respondents.
Research Procedure
The variables in this research model involve one criterion, two main predictor, and two control variables. The criterion variable is earnings management. The main predictors consist of status quo bias and endowment bias. Control variables involve education level and gender. Questionnaires are employed to measure the variables, as follow:
1. Status quo bias is measured by four questions. A question has a scale of 1 to 7 and 1 as strongly disagree and 7 as strongly agree.
2. Endowment bias is also measured by four questions. Each question has a scale of 1 to 7 and 1 as strongly disagree and 7 as strongly agree.
3. Earnings management is measured by six questions. These consist of two questions about accounting method changes, two questions about accounting estimation changes, and two questions of real activity manipulation. A question has a scale of 1 to 7 and 1 as strongly disagree and 7 as strongly agree.
4. Education level and gender variables are measured by using non-metric scales.

This study conducts some statistical tools to test the questionnaire validity and reliability, and research hypotheses. Factor analysis and Cronbach’s alpha are utilized to investigate the instrument validity and reliability. Multiple regression technique is done to examine the hypotheses. Earnings management is the criterion variable. Status quo bias and endowment bias are the main predictor variables. Control variables involve education level and gender. They are non-metric variables. The equation of multiple regression technique is as follow:

$$EM = \rho_0 + \rho_1.SQB + \rho_2.EB + \rho_3.EDU + \rho_4.GD + \epsilon \quad (1)$$

Where: EM= Earnings management; SQB= Status quo bias; EB= Endowment bias; EDU= Education level (1= undergraduate student; 2= graduate student or undergraduate degree; 3= doctoral student or graduate degree; 4= Doctoral degree); GD= Gender (1= female, 2= male)

Analysis Of Results
Validity and Reliability
Factor analysis is held to investigate the research instrument validity. Analysis of factor is employed on 74 usable questionnaires. A question item which has a factor loading of less than 0.50 is removed. Four questions are removed. They involve one question of status quo bias (question 4), one question of endowment bias (question 1), and two questions of earnings management (question 1 and 2). Table 1 reports the factor loadings of 10 usable questions in study. They involve three questions of status quo bias, three questions of endowment bias, and four questions of earnings management. The results of factor analysis indicate that KMO (Kaiser-Meyer-Olkin) sampling adequacy measure is 0.707. Furthermore, Bartlett’s sphericity
test has probability value of 0.000. It is significant. Therefore, it can be concluded that the next analysis can be held.

Table 1. Matrix of Rotated Component

<table>
<thead>
<tr>
<th>Questions</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQB1: I feel comfortable with accounting decision which I make because it will not cause an accounting problem</td>
<td></td>
<td></td>
<td>0.838</td>
</tr>
<tr>
<td>SQB2: I feel that it is not needed to change an accounting decision which I make because it does not violate financial accounting standards</td>
<td></td>
<td></td>
<td>0.716</td>
</tr>
<tr>
<td>SQB3: I feel comfortable with an accounting decision which I make because it causes satisfied accounting earnings</td>
<td></td>
<td></td>
<td>0.824</td>
</tr>
<tr>
<td>EB2: I tend to postpone debt interest expenses if it does not violate the debt covenant</td>
<td></td>
<td>0.866</td>
<td></td>
</tr>
<tr>
<td>EB3: I tend to shift expenses recognitions from current to next periods, if this does not violate financial accounting standards</td>
<td></td>
<td>0.852</td>
<td></td>
</tr>
<tr>
<td>EB4: I incline to distribute stock than cash dividends</td>
<td></td>
<td>0.715</td>
<td></td>
</tr>
<tr>
<td>EM3: I tend to reduce bad debt approximation to higher ongoing period accounting profits</td>
<td></td>
<td></td>
<td>0.548</td>
</tr>
<tr>
<td>EM4: I incline to reduce approximated obsolescence loss of inventory to higher ongoing period accounting profits</td>
<td></td>
<td></td>
<td>0.584</td>
</tr>
<tr>
<td>EM5: I incline to provide lenient sales credit term by lengthening the credit term span and enhance the sales discount to higher ongoing period accounting profits</td>
<td></td>
<td></td>
<td>0.807</td>
</tr>
<tr>
<td>EM6: I tend to reduce equipment and building maintenance expenditures to increase ongoing period accounting profits</td>
<td></td>
<td></td>
<td>0.671</td>
</tr>
</tbody>
</table>

Notes: SQB= Status quo bias; EB= Endowment bias; EM = Income increasing earnings management

Questionnaires reliability is examined by Cronbach’s alpha. The factors which are resulted from factor analysis are investigated by using Cronbach’s alpha. Table 2 reports the reliability test results by Cronbach’s alpha. When a Cronbach’s alpha is higher than 0.60, it is reliable (Sekaran & Bougie, 2010). The Cronbach’s alphas of the factors are higher than 0.60, they are reliable. This study utilizes the mean score of questions which meet reliability and validity tests for the further data analysis.
Classical Assumption Tests
This study tests research hypotheses by multiple regression analysis. Reliability of this analysis needs to meet classical assumptions which involve normality, no multicollinearity, homoscedasticity, and no autocorrelation assumptions. Kolmogorov-Smirnov test is held to investigate data normality. The results report that the data are normally distributed because the probability value is higher than 0.05 (Kolmogorov-Smirnov test= 0.200).

Multicollinearity existence is examined by variance inflation factor (VIF). Results show that the variance inflation factors of all independent variables are lower than 10 (status quo bias= 1.081, endowment bias = 1.078, education level= 1.064, and gender=1.057). Therefore, there is no multicollinearity problem.

Heteroscedasticity existence is checked by the Glejser test. Residuals are utilized as a criterion variable. Furthermore, it is employed on predictor variables. The outcomes show that there is no heteroscedasticity because there is no significant coefficient of regression of the predictor variables.

The existence of autocorrelation is tested by Durbin-Watson test. This tries to find the range which has \( d_U \) as lower and \( 4-d_U \) as upper limits by Durbin-Watson d statistic table (Gujarati & Porter, 2009). When the value of Durbin-Watson test located in the range, this reveals that there is no autocorrelation problem. Using significance level of 5% and four predictor variables, it is known that \( d_U \) is 1.739 and \( 4-d_U= 2.261 \). The outcome of data analysis reveals that Durbin-Watson score is 2.063. The Durbin-Watson score located in the range. Consequently, it is decided that there is no autocorrelation.

Descriptive Statistics
Table 3 indicates means of scores and standard deviations. Mean values of the variables are higher than 4 (neutral). Respondents have high status quo bias (4.9054). The mean value of endowment bias is 4.3198. Income increasing earnings management score has a mean of 4.7703. This means that respondents incline to conduct profits increasing than decreasing earnings management. Endowment bias is the most disperse among the variables because it has the highest standard deviation (1.2194).

<table>
<thead>
<tr>
<th>Table 3. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Status quo bias</td>
</tr>
<tr>
<td>Endowment bias</td>
</tr>
<tr>
<td>Earnings management</td>
</tr>
</tbody>
</table>
It is also conducted an additional test to discover the respondents’ tendency of human psychological characteristics and earnings management behaviors. One sample T-test is done to contrast the mean values against a benchmark value of 4 (neutral score). Table 4 reports the results of one sample T-test. Results reveal that mean values of status quo bias (4.9054) and income increasing earnings management (4.773) are significantly higher than 4 (neutral score) at probability value of 0.000, and endowment bias (4.3198) has probability value of 0.027. These results show that, on average, respondents have high status quo and endowment biases and, they tend to conduct income increasing earnings management actions.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean*</th>
<th>Mean Difference</th>
<th>T Value</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status quo bias</td>
<td>4.9054</td>
<td>0.9054</td>
<td>8.443</td>
<td>0.000</td>
</tr>
<tr>
<td>Endowment bias</td>
<td>4.3198</td>
<td>0.3196</td>
<td>2.256</td>
<td>0.027</td>
</tr>
<tr>
<td>Earnings management</td>
<td>4.7703</td>
<td>0.7703</td>
<td>8.305</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Notes: *Test value= 4 (neutral score)

In Table 5, the correlation coefficients between variables are shown. Results of Pearson correlation analysis presents that correlation between earnings management and status quo bias, and correlation between earnings management and endowment bias are significant at 0.01 probability value levels. Correlation between endowment bias and status quo bias is significant at 0.01 probability value. The highest correlation (0.416) is the relationship between earnings management and endowment bias. The lowest coefficient (0.252) is the link between endowment bias and status quo bias.

Spearman correlation analysis results reports that all variables correlated each other at 0.01 levels, except the correlation coefficient between status quo and endowment biases. The highest correlation coefficient (0.396) is the connection between endowment bias and earnings management.

<table>
<thead>
<tr>
<th>Variables</th>
<th>SQB</th>
<th>EB</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status quo bias (SQB)</td>
<td>1</td>
<td>0.191</td>
<td>0.332**</td>
</tr>
<tr>
<td>Endowment bias (EB)</td>
<td>0.252*</td>
<td>1</td>
<td>0.396**</td>
</tr>
<tr>
<td>Earnings management (EM)</td>
<td>0.381**</td>
<td>0.416**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: The correlations below diagonal are Person correlations (two-tailed) and above diagonal are Spearman correlations (two-tailed). Correlation is significant at: **0.01; *0.05 levels (two-tailed)

**Hypotheses Testing**
Hypothesis 1 and 2 are examined by multiple regression technique. Table 6 reveals the results. The criterion variable is earnings management. The first hypothesis formulates that status quo bias positively influences profit increasing earnings management. The results confirm hypothesis 1. The regression coefficient of status quo bias is positive (0.226) and the
probability value is significant (0.012). It is concluded that status quo bias positively affects profit increasing earnings management.

Second hypothesis predicts that endowment bias has a positive effect on income increasing earnings management. The multiple regression analysis results confirm hypothesis 2. Regression coefficient of endowment bias is positive (0.213) and its probability value is significant (0.002). It is concluded that endowment bias positively affects profit increasing earnings management.

This study includes education level and gender as control variables. The education level has a negative coefficient (-0.556) and a significant probability value (0.003). Based on these results, it is concluded that education level affects income increasing earnings management actions. Higher levels of education are connected to lower income increasing earnings management level (earnings management score mean for undergraduate students is 4.9273 and graduate students is 4.3158). The results reveal that the regression model has controlled for the impacts of education level on profits enhancing earnings management.

Gender regression coefficient is negative of -0.146 but its probability value is insignificant (0.392). This means that gender does not influence profits increasing earnings management (profit increasing earnings management score mean for female is 4.8 and for male is 4.7083).

<table>
<thead>
<tr>
<th>Table 6. Results of Multiple Regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Status quo bias</td>
</tr>
<tr>
<td>Endowment bias</td>
</tr>
<tr>
<td>Education level</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>Value of F</td>
</tr>
</tbody>
</table>

Result of data analysis support hypothesis 1 that status quo bias positively influences earnings management actions. This finding confirms agency theory explanation. Accountants with high status quo bias will conduct opportunistic behavior by doing income increasing earnings management. The results also support transaction costs theory that accountants with status quo bias will do income increasing earnings management to lower transaction costs.

Data analysis results also confirm hypothesis 2 that endowment bias positively affect earnings management behavior. This finding supports agency theory and transaction cost theory explanations. Accountants with high endowment bias tend to do income increasing earnings management to opportunistic actions and to lower transaction costs.
Conclusion And Discussion

This study investigates the effects of status quo and endowment biases on income increasing earnings management. Descriptive statistics show that respondents prefer to conduct profits increasing than decreasing earnings management. Endowment bias is the most disperse among the variables because it has the highest standard deviation. Results of hypotheses testing indicate that both status quo bias and endowment bias positively affect income enhancing earnings management. Education level influences profit increasing earnings management, but gender does not. These findings provide novel theoretical contributions that income increasing earnings management actions are influenced by status quo and endowment biases. This study provides new predictor variables which affect earnings management. These are human psychological characteristic variables. Other predictor variables have an impact on earnings management, such as inventory methods (Gopalakrishnan, 1994), financial expertise and activism of members of audit committee (Ioualalen et al., 2015), and corporate strategy and size of firm (Uwuigbe et al., 2015) and others.

This study has two limitations. First, this research focuses on two main independent variables, namely, status quo bias and endowment bias. Future work ought to consider the impacts of other predictor or moderator variables, such as work experience, social capital, and jobs. Second, the research sample is not chosen at a random basis. Next research should explore whether the research conclusions can be generalized to the larger population.

This study has practical contributions to understand the human psychological characteristics of accountants that affect accounting decision making. Research findings show that status quo bias and endowment bias positively influence income increasing earnings management. This suggests that owners or top management of firms ought to consider status quo bias and endowment bias when choosing accountants for their companies. If there is a greater preference to conduct income increasing earnings management decisions, then they should consider choosing an accountant with high status quo bias and high endowment bias. However, if profits enhancing earnings management is deemed to be an unethical action, they should select an accountant with low status quo bias and low endowment bias.
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