THE IMPACT OF EARNING MANAGEMENT AT INITIAL PUBLIC OFFERINGS ON RETURN ON SHARES WITH PROFITABILITY AS INTERVENING VARIABLE OF COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

Ciquita Yan Toba
Wilson R L Tobing

ABSTRACT

The purpose of this study is to attain three things. Firstly, to test and analyze the impact of earning management at initial public offering (IPO) on company profitability after IPO. Secondly, to test and analyze the impact of earning management at IPO and company profitability after IPO on company return on shares after IPO. Thirdly, to prove company profitability before IPO as the mediating variable of the impact of earning management at IPO on company return on shares after IPO. The population of this study is the non-financial companies listed on Indonesia Stock Exchange in 2004 to 2015. Non-financial companies intended do not come from hotel, tourism and real estate industry. Furthermore, the companies as sample are taken from population by using stratified random sampling where the years acting as strata. This study uses path confirmatory factor analysis and path analysis model as method of data analysis. This study sums up three things. Firstly, earning management at initial public offering (IPO) does not have the impact on company profitability after IPO. Secondly, earning management at IPO and company profitability after IPO have positive impact on company return on shares after IPO. Thirdly, company profitability after IPO does not act as the mediating variable of the impact of earning management at IPO on company return on shares after IPO.

Keywords: initial public offering, earning management, return on shares, profitability.

BACKGROUND

When a company decides to go public, all attempts are made to appear attractive on the first day of shares listing on the stock exchange. Therefore, a well-preparation is done in advance of the public offering (Cahyanto, 2003). According to Gumanti (2001), the management of a company must explain the company's condition thoroughly before offering its shares. Sulistyanto and Wibsono (2003) state that the phenomenon of information asymmetry and performance degradation often occurs at the IPO. Therefore, a manager attempts to regulate reported profit rates by selecting certain accounting methods to increase the acceptance of the IPO. However, Shivakumar (2000) explains that a manager has conducted overstate offerings before announcing seasoned equity offerings. In this case, a management of a company undertakes information asymmetry efforts in order to obtain a high initial share price. The manager's attitude, however, in manipulating the company's financial statements is unlikely to continue in the long run, thus after the offer, the company will experience a decrease in performance (under-performance). According to Shivakumar (2000), the low performance of the post-offering is due to the "inappropriate" earning measurement (overstated) and is known as earning management.

The existence of earnings management, especially the one that occurs before the IPO has not yet given consistent impacts on the profitability of a company after the IPO. This is shown by studies conducted by Setyaningrum & Pujjisutti (2009) and Sulistiani & Maha (2016) which show the positive impact of earnings management on company's profitability while studies by Dewi (2013), Nuryaman (2013), Yudha, Dzulkiori & Sudjana (2016) show the negative impact of earnings management on company’s profitability. The Differences in the results of similar studies also occurred in the studies about the impact of earnings management before the IPO on company return on shares after the IPO. Some research show positive impacts (Pradana & Wirasedana, 2016), some show negative impact (Joni & Hartono, 2009), and some even show zero impact (Surya & Januarti, 2012; Indrayanti & Wirakusuma, 2017). The same occurs to the profitability impact after the IPO on company return on shares after the IPO. For example, studies conducted by Riyanti (2012) and Dewi (2013) show that profitability after the IPO has a positive impact on return on shares. Meanwhile, a different result is shown by Andayani, Wikuana, & Sedana (2017), which documents that the profitability of the company after the IPO does not have any impact on return on shares.

Based on the contradictory results of those studies, the current study aims to re-examine the impact of earnings management at the IPO on company's profitability after the IPO, and the impact of company's earnings management during the IPO and its profitability after the IPO on return on shares of companies listed on the Indonesia Stock Exchange. While at the same time, this study also aims to examine the existence of company's profitability after IPO as intervening variable or a mediator of earnings management impact during IPO on company return on shares after the IPO at Indonesia Stock Exchange.

THEORETICAL FRAMEWORK AND THE DEVELOPMENT OF HYPOTHESIS

Earning Management

Scott (2006) explains that earning management is the selection of accounting policies by managers to achieve specific goals. Sutrisno (2002) defines earnings management as an intervention with a specific purpose in an external financial reporting process to gain some private advantages. Whereas, according to Healy & Wahlen (1999), earnings management occurs when a manager uses judgments in financial reporting, and establishes transactions to change financial statements in order to manipulate the amount of earnings to some stakeholders about the underlying economic performance of the company, or to influence the
outcome of the agreement depending on the reported accounting figures. The earnings management in this study was measured by discretionary accruals (DA) using the Kang and Sivaramakrishnan (KS) model (1995). This model was chosen because it is the most recent and has not been used widely to measure earnings management. The steps to calculate DA based on KS model are as follows.

1. Calculating accrual balance (AB) by using equation below.
   \[ AB_{it} = CA_{it} - CASH_{it} - CL_{it} - DEP_{it} \]
   where: \( AB_{it} \) = accrual balance of company \( i \) in year \( t \), \( CA_{it} \) : current assets of company \( i \) in year \( t \), \( CASH_{it} \) : cash of company \( i \) in year \( t \), \( CL_{it} \) : current liabilities of company \( i \) in year \( t \), \( DEP_{it} \) : depreciation and amortisation costs of company \( i \) in year \( t \).

2. Calculating the values of \( \delta_1 \), \( \delta_2 \), and \( \delta_3 \) by using the formula in the equation as follow.
   \[
   \begin{align*}
   \delta_1 &= \frac{ART_{it}}{REV_{it}} \\
   \delta_2 &= \frac{OCAL_{it}}{EXP_{it}} \\
   \delta_3 &= \frac{DEP_{it}}{GPPE_{it}}
   \end{align*}
   \]
   where: ART: account receivable of company; REV: revenue; OCAL: total current assets minus account receivable minus current liabilities of company; EXP: net income minus operating income minus depreciation cost of company; DEP, depreciation and amortisation cost of company; GPPE = gross fixed assets of company; \( i = \text{cross section unit: company}, t = \text{the concerned year}, t - 1: \text{one year before the concerned year}. \)

3. Estimating regression coefficients \( \phi_0, \phi_1, \phi_2, \) dan \( \phi_3 \) of the equation as follow.
   \[
   \begin{align*}
   AB_{it}/ART_{itt} &= \phi_0 + \phi_1 (\delta_1)_{itt} + \phi_2 (\delta_2)_{itt} + \phi_3 (\delta_3)_{itt} \\
   \end{align*}
   \]
   where \( t = \text{the concerned period}, t - 1: \text{one period before the concerned period}. \)

4. Creating a prediction value for \( AB_{it}/ART_{itt} \). This prediction value is the value of non- discretionary accruals (NDA).

5. Calculating the value of discretionary accruals (DA) with the formula of the equation as follows.
   \[ DA_{it} = AB_{it}/ART_{itt} - NDA_{it} \]
   If the obtained value of discretionary accruals is greater than 0 (DA > 0), then the management has raised the profit (income increasing), and vice versa.

**Profitability as a Proxy for Financial Performance**

Financial performance reflects the fundamental performance of a company as measured through financial statements. One of the ratios resulting from financial statement analysis is profitability ratio. This profitability ratio describes the ability of a company to generate profits (Hanafi, 2008). A higher profitability ratio better improves the prospects of the company (Sujoko and Soebiantoro, 2007).

- **a.** Change of Net Profit Margin (Setyaningrum & Pujiausti, 2009; Dewi, 2013, Yudha, et al., 2016) with the formula in the equation as follows.
  \[ \Delta NPM = NPM_{i,t+1} - NPM_i \]
- **b.** Change of Gross Profit Margin (Wardani & Fitriati, 2010) with the formula in the equation as follows.
  \[ \Delta GPM = GPM_{i,t+1} - GPM_i \]
- **c.** Change of Return On Equity (Andayani, et al., 2017; Yudha, et al., 2016) and change of Return On Investment (Yudha, et al., 2016) with the formula in the equation as follows.
  \[ \begin{align*}
  \Delta ROE &= ROE_{i,t+1} - ROE_i \\
  \Delta ROA &= ROA_{i,t+1} - ROA_i
  \end{align*} \]

**Return on Shares**

Return on shares is a result obtained from stock investment activities conducted in the capital market (Hartono, 2015).

**The Impact of Earnings Management at the IPO on Company Profitability After the IPO**

The result of Dewi (2013) and Nuryman (2013) studies shows that the company's earnings management before the initial offering negatively affects the profitability of the company after the initial offering. The decline in profitability, according to Joni & Hartono (2009), reflects the inability of a management to continue profit manipulation after the company has conducted the initial public offering.

- **H1:** Earnings management at the IPO negatively affects the company profitability after the IPO.

- **H2:** Earnings management at the IPO negatively affects the return on shares after the IPO.
The Impact of Company Profitability After the IPO on Company Return on Shares After the IPO
Profitability can serve as a signal for companies at the market to tell that the company is still prospective to grow (Riyanti, 2012). This argument is confirmed by the result of Riyanti (2012) and Dewi (2013) studies which show that the company profitability after the initial public offering positively affects the company return on shares after the initial public offering.

H2b: Company profitability after the IPO positively affects company return on shares after the IPO

The Existence of Company Profitability After the IPO as Mediation Variable of the Impact of Earnings Management at the IPO on Return on Shares After the IPO
The existence of company profitability as mediation variable when the amount of indirect impact (the impact of earnings management at the IPO on return on shares after the IPO through company profitability) is bigger than that of the direct impact of earnings management at the IPO on company return on shares after the IPO.

H3: Company profitability after the IPO mediates the impact of earnings management at the IPO on return on shares after the IPO.

RESEARCH METHODOLOGY
The object of the current study is the issuers that did the initial public offering at Indonesia Stock Exchange from 2004-2015. The information of financial statement used is financial information one year before the company did an IPO and one year after the IPO. The population in the current study is non-financial companies except companies engaged in the hospitality sector, travel and real estate. Based on the information obtained from IDX Fact Book owned by Indonesia Stock Exchange, there are 227 companies that went public from 2004 until 2015. Considering the population of the issuers is limited only to the above provisions, the researchers recalculated the number of issuers that become the population. Based on the recalculation, there were 109 companies. The sampling method used was random sampling method (stratified random sampling). The Slovin formula can be seen in the following equation (see Suliyanto, 2009).

\[ n = \frac{N}{1 + N \cdot e^2} = \frac{109}{1 + 109(0.05)(0.05)} = 85.66 \approx 86 \text{ companies (rounded up).} \]

Based on the calculation of the formula, it was then obtained the number of samples (n) as many \( n = \frac{N}{1 + N \cdot e^2} = \frac{109}{1 + 109(0.05)(0.05)} = 85.66 \approx 86 \) companies (rounded up).

The path analysis model is used to analyse the relationship pattern between the variables which aims to find out the direct or indirect impacts of a set of independent variables (exogenous) to the dependent variable (endogen) (Riduwan & Kuncoro, 2008).

RESULT
Confirmatory factor analysis is used to select the right indicator as profitability proxy.

### The Result of Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value Loading Factor</th>
<th>S.E</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>∆NPM</td>
<td>0.910</td>
<td>0.412</td>
<td>0.015</td>
<td>Valid</td>
</tr>
<tr>
<td>∆GPM</td>
<td>0.795</td>
<td>0.259</td>
<td>0.001</td>
<td>Valid</td>
</tr>
<tr>
<td>∆ROE</td>
<td>0.866</td>
<td>0.566</td>
<td>0.065</td>
<td>Valid</td>
</tr>
<tr>
<td>∆ROA</td>
<td>0.950</td>
<td>0.586</td>
<td>0.054</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Output WarpPLS3 that has been modified.

From the four indicators above, it turns out that ROA shows the largest loading factor which is 0.950. Thus, ROA serves as an indicator that best reflects profitability. Furthermore, this ROA is used as a proxy for profitability which can be used in forming path analysis model.

After determining the ROA as the best profitability proxy, then the next step is to create path analysis model by using variance-based structural equation model. This structural equation model can be seen below.

\[ \beta_1 = 0.068 \quad (p\text{-value} = 0.371) \]
\[ R_1^2 = 0.005 \quad (p\text{-value} < 0.001) \]
\[ \beta_2 = 0.477 \quad (p\text{-value} < 0.001) \]
\[ R_2^2 = 0.539 \]

Estimated result of Variance-based Structural Equation Model

Source: Output WarpPLS that has been modified.
Hypothesis 1 states that earnings management at the IPO negatively affects company profitability after the IPO. This hypothesis was tested by comparing the probability value of the regression coefficient $\beta_1$ with the significance level ($\alpha$) of 5%. In the figure above, the probability value of regression coefficient $\beta_1$ of 0.371 and the regression coefficient show a positive sign. Since the probability value is greater than $\alpha$ of 5%, the null hypothesis is accepted. Thus, earnings management at the IPO has no impact on profitability after the IPO.

Hypothesis 2a states that earnings management at the IPO negatively affects company return on shares after the IPO. This hypothesis was tested by comparing the probability value of the regression coefficient $\beta_3$ with the significance level ($\alpha$) of 5%. The figure above shows that the probability value of regression coefficient $\beta_2$ is less than 0.001 and the regression coefficient shows a positive sign. Given that this probability value is smaller than $\alpha$ of 5%, then the null hypothesis is accepted. Thus, earnings management at the IPO has a significant positive impact on return on shares after the IPO.

Hypothesis 2b states that the company profitability after the IPO positively affects return on shares after the IPO. This hypothesis was tested by comparing the probability value of the $\beta_3$ regression coefficient with a significance level ($\alpha$) of 5%. In the figure above, the probability value of $\beta_3$ regression coefficient is less than 0.001. This value is smaller than $\alpha$ of 5%, so the alternative hypothesis is accepted. Thus, the company profitability after the IPO positively affects company return on shares after the IPO.

Hypothesis 3 states that the existence of profitability can mediate the effect of earnings management at the IPO on company return on shares after the IPO. The testing for this hypothesis was done by comparing indirect effect (result of multiplication of standardized regression coefficient $\beta_1$ with $\beta_3$, second number coefficient is in the figure above) with direct effect (see standardized regression coefficient $\beta_2$ in the figure above):

a. The amount of indirect effect of earnings management at the IPO on company return on shares after the IPO through profitability after the IPO is $0.068 \times 0.477 = 0.0324$.

b. The amount of direct effect of earnings management at the IPO on company return on shares after the IPO is 0.451.

Considering the amount of indirect effect which is less than that of the direct effect, the hypothesis which states the existence of profitability after the IPO as a variable mediating the effect of earnings management at the IPO on company return on shares after the IPO is rejected. The existence of profitability during IPO cannot mediate the effect of earnings management at the IPO on company return on shares after the IPO.

The Limitations of the current study is that it only used 3 (three) research variables which are modeled in path analysis. Further research can continue to use the path analysis model by adding some research variables that are expected to have impacts besides earnings management at the IPO on company return on shares after the IPO.

REFERENCES


Ciquita Yan Toba
Maranatha Christian University
Jl Prof. Drg. Suria Sumatri No. 60 Bandung, Indonesia
ciki_toru@yahoo.co.uk

Wilson R L Tobing
Lecture
Sampoerna University
L’Avenue, Jl. Raya Pasar Minggu Kav. 16 Pancoran Jakarta, Indonesia
wilsonrltobing@gmail.com