

Using Earnings Management Techniques during Initial Public Offerings of a Company

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Abstract

The purpose of this study is to analyze the indication of earnings management conducted by companies, to analyze the differences of earnings management between IPO and one period after IPO, to analyze the differences of earnings management between IPO and one period before IPO, to analyze the differences of earnings management between one period before IPO and one period after IPO. Because the scope of financial accounting is very broad, the researcher tries to limit on the relationship between IPO and earnings management that the company listed on IDX (Indonesian Stock Exchange) in period 2008-2012. From the result and discussion, the conclusion of this research was that the companies do earnings management on the year of IPO, the companies don't do earnings management one year before IPO (t-1) and the companies don't do earnings management one year after IPO (t+1). There are differences of earnings management between IPO and one period after IPO, and differences of earnings management between IPO and one period before IPO. There are no differences of earnings management one period before IPO and one period after IPO.

INTRODUCTION

Research Background

Earnings management in the Initial Public Offerings (IPO) process, has attracted attention in accounting research. Earnings management in the Initial Public Offerings (IPO) process is a particular concern because of the extent of information asymmetry between the owners-managers and investors (Leland and Pyle 1977), and between informed and uninformed investors (Rock 1986; Beatty and Ritter 1986). Because little information is available about these firms prior to going public, investors have to rely extensively on the prospectus for relevant financial information.

The information asymmetry between management and related parties creates an opportunity for management to make earnings management. Management also has incentive to engage in earnings management to ensure that the issue is fully subscribed because their compensation and/or reputation depend on the success of the Initial Public Offerings (IPO). This research will analyze the impact of earnings management during Initial Public Offerings (IPO) in IDX.

An initial public offering (IPO) is the first time a company offers its shares for sale to general investors. The process is called "going public." The purpose of IPO is to share the company stocks in public and also gain the more equity to expand the company. IPO in Indonesia happens if a company goes public in IDX (Indonesian Stock Exchange) for the first time.

IDX shall announce the listing and trading of the relevant shares at the latest one working day at the latest prior to the commencement of trading of such shares.

The company that does IPO in Indonesia, usually does increasing earnings management in the time of IPO to attract the investors and the one period after and before the earnings management will be decrease. So based on the description above and the research gap, this research will analyze the earnings management during IPO in IDX (Indonesia Stock Exchange).

Research Questions

Based on the background, and the different result from previous researchers the earnings management during IPO. So the researcher tries to formulate the research questions as follows:

- Are there any indication of earnings management conducted by companies?
- Are there any differences of earnings management between IPO and one period after IPO ?
- Are there any differences of earnings management between IPO and one period before IPO?
- Are there any differences of earnings management between one period before IPO and one period after IPO?

Research Objectives

The objectives that the researcher wants to achieve from this thesis are:

- To analyze indication of earnings management conducted by companies.
- To analyze the differences of earnings management between IPO and one period after IPO.
- To analyze the differences of earnings management between IPO and one period before IPO.
- To analyze the differences of earnings management between one period before IPO and one period after IPO.

LITERATURE REVIEW

Agency Theory

Prior experimental research utilizes agency theory in a management accounting context and suggests that when there is an agency problem, managers may make operating decisions that are not in the best interest of their firms (Harrison and Harrell 1993; Harrell and Harrison 1994; Tuttle, Harrell, and Harrison 1997; Rutledge and Karim 1999; Booth and Schulz 2004). In a test of the theoretical framework set forth by Kanodia, Bushman, and Dickhaut (1989) i.e., that both incentives and information asymmetry may help explain why managers will continue projects expected to become unprofitable),

Harrell and Harrison (1994) extend the findings of their initial study by examining how the components of the agency problem (i.e., incentives and information asymmetry) interact to affect managers' decisions to continue failing projects. The authors hypothesize that managers who experience both components of agency theory are more likely to continue failing projects than managers who experience incentives alone, information asymmetry alone, or experience neither incentives nor information asymmetry.

Adams et al. (2006) said that the level of discretionary loan loss provisions is positively related to the first day returns to investors in mutuals. The results are consistent with management of mutual thrifts benefiting at the conversion from reduced pre-IPO earnings and book equity resulting from earnings management. Therefore, managers have the incentive to minimize the value of the offer price so that directors and insiders can increase their proportional ownership in the firm at the lowest possible price (Adams et al., 2006).

Carow et al.(2006) reported that initial first-day returns to investors will be increasing in the day after IPO and also provide evidence that managers influence the terms of the conversion offer and that greater levels of management participation in the offering are associated with lower offer sizes and greater initial IPO returns.

Hypothesis Development

In the IPO (Initial Public Offerings), a company will make the more higher earnings management because to attract the investor and emiten. One period after IPO (one year after IPO), the management will decrease the earnings management. So based on that the hypothesis purposed is:

H1: There are differences of earnings management between IPO and one period after IPO

When a company makes IPO (Initial Public Offerings), the management will make more higher earnings management to attract the investors to invest their monies in the company. But before that, one period or one year before IPO done, the management will not make higher earnings management in one period before IPO (one year before IPO) management will decrease the earnings management. So based on that the hypothesis purposed is:

H2: There are differences of earnings management between IPO and one period before IPO

When a company makes IPO (Initial Public Offerings), management will make the more higher earnings management one period before IPO to attract the investors to invest their money in the company. But after that, one period or one year after IPO done, management will not make higher earnings management. In one period before IPO (one year before IPO) management will increase the earnings management rather than one period after IPO. So based on that the hypothesis purposed is:

H3: There are differences of earnings management between one period before IPO and one period after IPO

RESEARCH METHOD

Population and Sample

In this research, the population is all companies that listed on IDX (Indonesian Stock Exchange) in period 2008-2012. The sample is the company that does IPO during 2008-2012. The period before company IPO is 2007-2011, and the period after IPO is 2009-2013. It means 1 year before and 1 year after. These companies choose the above years because data can be accessed.

Source data and technique collecting data

The data in this research is secondary data. The aim is to obtain secondary data that can be used as the basis for the writer in preparing thesis. In preparing the thesis, the writer also conducts the documentary data to get the necessary data. It is done by: Documentation. Writer collect documents relating to the data financial reporting to obtain the data needed to prepare thesis at www.idx.co.id.

Operational Definition and Measurement

- a. IPO (Initial Public Offerings) is the first time a company public their stocks in the primary market.
- b. Earnings management is the act of intentionally influencing the process of financial reporting to obtain some private gain. The earnings management in this research use The Modified Jones Model (Dechow et al., 1995). The Modified Jones Model is designed to eliminate the conjectured tendency of the Jones Model to measure discretionary accruals with error when discretion is exercised over revenue recognition. In the modified model, non-discretionary accruals are estimated during the event period (i.e., during periods in which earnings management is hypothesized) as follows:

1. Calculate total accrual with the formula:

$$TA_{it} = NI_{it} - CFO_{it}$$

2. Calculate the value of α_1 , α_2 , α_3 with Jones Model as follows:

$$TA_{it} = \alpha_1 + \alpha_2 \Delta R_{evit} + \alpha_3 PPE_{it} + \hat{\epsilon}_{it}$$

And then to make the same scale, all variable must be divided by A_{it-1} , so the formula will become:

$$TA_{it}/A_{it-1} = \alpha_1(1/A_{it-1}) + \alpha_2 (\Delta R_{evit}/A_{it-1}) + \alpha_3(PPE_{it}/A_{it-1}) + \hat{\epsilon}_{it}$$

3. Calculate NDA (Non Discretionary Accruals) with formula:

$$NDA_{it} = \alpha_1(1/A_{it-1}) + \alpha_2 (\Delta R_{evit}/A_{it-1} - \Delta R_{ecit}/A_{it-1}) + \alpha_3(PPE_{it}/A_{it-1}) + \hat{\epsilon}_{it}$$

The value of α_1 , α_2 , α_3 from the calculation in step number 2 will be get formula to NDA.

4. Calculate DA (Discretionary Accruals) that is the indicator of earnings management with formula:

$$DA_{it} = TA_{it} - NDA_{it}$$

Whereas:

TA_{it} = Total Accrual company i in period t

NI_{it} = Net Income company i in period t

CFO_{it} = Cash flow from operation company i in period t

NDA_{it} = Non Discretionary Accruals company i in period t

DA_{it} = Discretionary Accrual company i in period t

A_{it-1} = Total Assets company i in period t

ΔR_{evit} = change in revenue company i in period t

ΔR_{ecit} = change in receivable company i in period t

PPE_{it} = Property, Plant and Equipment company i in period t

α_1 , α_2 , α_3 = coefficient regression

$\hat{\epsilon}_{it}$ = error term

ANALYSIS AND INTERPRETATION

Descriptive Statistics

Sample in this research were IPO companies listed in BEI for period 2008-2012:

Table 4.1. Sample Companies

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|-------------|------|------|------|------|------|-------|
| IPO company | 16 | 11 | 21 | 23 | 11 | 82 |

The sample companies in year 2008 were 16 companies, in year 2009 were 11 companies, in year 2010 were 21 companies, in year 2011 were 23 companies, and in year 2012 were 11 companies, so the total were 82 companies.

The table below shows the statistics descriptive from the data 86 data.

Table 4.2. Descriptive Statistics

| Time | N | Minimum | Maximum | Mean | Std. deviation |
|------|----|---------|---------|---------|----------------|
| t-1 | 82 | -4.66 | 0.90 | -0.0759 | 0.55195 |
| t0 | 82 | -1.96 | 1.91 | 0.0047 | 0.36979 |
| t+1 | 82 | -0.62 | 1.75 | 0.0209 | 0.28334 |

From the table 4.2, the mean of variable DA (Discretionary Accrual) in t0 is 0.0047 (this means the companies use income increasing method in earnings management, increasing method used to make the higher earnings in a company to attract the investor). Income increasing means that the company make higher revenue and increase income.

Meanwhile, in t-1 the value of DA was -0.0759 (this means the companies used income decreasing method in earnings management). Income decreasing was used to make the lower manipulation of earnings from a company. Income decreasing means the decreasing income rather than previous years. This means the higher earnings management during IPO (t0). Meanwhile, the DA (Discretionary Accrual) in t+1 is 0.0209 was higher than 0.0047 (t0).

Normality Test

Normality test used in this research was using the Kolmogorof Smirnov test. The early data before normal is shown in the table below:

Table 4.3. Normality Test

One-Sample Kolmogorov-Smirnov Test

| | | | Unstandardized Residual |
|----------------------------------|----------------|--|-------------------------|
| N | | | 82 |
| Normal Parameters ^{a,b} | Mean | | ,0000000 |
| | Std. Deviation | | ,34100445 |
| Most Extreme Differences | Absolute | | ,229 |
| | Positive | | ,229 |
| | Negative | | -,219 |
| Kolmogorov-Smirnov Z | | | 2,072 |
| Asymp. Sig. (2-tailed) | | | ,000 |

a. Test distribution is Normal.

b. Calculated from data.

From the tabel 4.3. the sig. Kolmogorof Smirnov is $0.000 < 0.05$ so the data is not normal. So in this research will use Wilcoxon signed test.

Accruals have the desirable trait of giving a summary measure of the firms accounting choice. In earnings management research they are usually divided into two parts, discretionary and nondiscretionary accruals, of which the first is the proxy for earnings management. Because discretionary accruals cannot be observed directly from financial statements they have to be estimated using some kind of a model. These models form an expectation on the nondiscretionary accruals level and the amount the actual observed accruals deviate from this level is assumed to be the discretionary accruals. Thus, discretionary accruals are defined as discretionary through the model used. Whether this is a good proxy for earnings management depends on the ability of the model to correctly predict how changes in business circumstances affect accruals (Spohr, 2005).

This research will use t-test to analyze the indication of earnings management conducted by companies:

Table 4.4. Indication Earnings Mangement t0

One-Sample Test

| | Test Value = 0 | | | | | |
|----|----------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| t0 | 2,081 | 81 | ,041 | ,06306 | ,0028 | ,1234 |

From the table, the result show the significant value is $0.041 < 0.05$ so it can be concluded the companies do earnings management during IPO t0.

Table 4.5. Indication Earnings Mangement t-1

One-Sample Test

| | Test Value = 0 | | | | | |
|-----|----------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| t_1 | ,333 | 81 | ,740 | ,00645 | -,0321 | ,0450 |

From the table, the result show the significant value is $0.740 > 0.05$ so it can be concluded the companies don't do earnings management one year before IPO (t-1).

Table 4.6. Indication Earnings Mangement t+1

One-Sample Test

| | Test Value = 0 | | | | | |
|----|----------------|----|-----------------|-----------------|---|-------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| t1 | 1,063 | 81 | ,291 | ,03191 | -,0278 | ,0916 |

From the table, the result show the significant value is $0.291 > 0.05$ so it can be concluded the companies don't do earnings management one year after IPO (t+1).

Hypothesis Testing

Because of result of normality test, the data is not normal so for the hypothesis testing, Wilcoxon test. Was the result of Wilcoxon signed can be seen from table 4.4.

Table 4.7. Wilcoxon signed test (H1)

| | | Ranks | | |
|---------|----------------|-----------------|-----------|--------------|
| | | N | Mean Rank | Sum of Ranks |
| t1 - t0 | Negative Ranks | 46 ^a | 39,67 | 1825,00 |
| | Positive Ranks | 32 ^b | 39,25 | 1256,00 |
| | Ties | 4 ^c | | |
| | Total | 82 | | |

- a. t1 < t0
- b. t1 > t0
- c. t1 = t0

Test Statistics^b

| | t1 - t0 |
|------------------------|---------------------|
| Z | -1,417 ^a |
| Asymp. Sig. (2-tailed) | ,023 |

- a. Based on positive ranks.
- b. Wilcoxon Signed Ranks Test

This section will discuss about the result of hypothesis testing, as follows:

H1: There are differences of earnings management between IPO and one period after IPO

From the Wilcoxon test result, the sig. (2-tailed) is 0.023 < 0.05, so H1 accepted. This means there are differences of earnings management between IPO and one period after IPO.

Table 4.8. Wilcoxon signed test (H2)

| | | Ranks | | |
|----------------------|----------------|-----------------|-----------|--------------|
| | | N | Mean Rank | Sum of Ranks |
| t0 - t ₋₁ | Negative Ranks | 40 ^a | 37,10 | 1484,00 |
| | Positive Ranks | 40 ^b | 43,90 | 1756,00 |
| | Ties | 2 ^c | | |
| | Total | 82 | | |

- a. t0 < t₋₁
- b. t0 > t₋₁
- c. t0 = t₋₁

Test Statistics^b

| | t0 - t ₋₁ |
|------------------------|----------------------|
| Z | -,652 ^a |
| Asymp. Sig. (2-tailed) | ,514 |

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

H2: There are differences of earnings management between IPO and one period before IPO

From the result, the sig. (2-tailed) is 0.514 > 0.05, so H2 rejected. This means there are no differences of earnings management between IPO and one period after IPO.

Table 4.9. Wilcoxon signed test (H3)

| | | Ranks | | |
|----------------------|----------------|-----------------|-----------|--------------|
| | | N | Mean Rank | Sum of Ranks |
| t1 - t ₋₁ | Negative Ranks | 40 ^a | 38,55 | 1542,00 |
| | Positive Ranks | 40 ^b | 42,45 | 1698,00 |
| | Ties | 2 ^c | | |
| | Total | 82 | | |

- a. t1 < t₋₁
- b. t1 > t₋₁
- c. t1 = t₋₁

Test Statistics^b

| | t1 - t ₋₁ |
|------------------------|----------------------|
| Z | -,374 ^a |
| Asymp. Sig. (2-tailed) | ,708 |

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

H3: There are differences of earnings management between one period before IPO and one period after IPO,

From the result, the sig. (2-tailed) is 0.708 > 0.05, so H3 rejected. This means there is no differences of earnings management between one year before IPO and one period after IPO.

Discussion

Indication of Earnings Management Conducted by Companies

From the t-test result, indication that companies do earnings management or not can be detected from the DA

(Discretionary Accruals), the significant value is $0.041 < 0.05$ so it can be concluded the companies do earnings management during IPO t0. Meanwhile, the significant value is $0.740 > 0.05$ so it can be concluded the companies don't do earnings management one year before IPO (t-1) and the significant value is $0.291 > 0.05$ so it can be concluded the companies don't do earnings management one year after IPO (t+1).

CONCLUSION

1. From the t-test result, indication where the companies do earnings management or not can be detected from the DA (Discretionary Accruals), the significant value is $0.041 < 0.05$ so it can be concluded the companies do earnings management during IPO t0. Meanwhile, the significant value is $0.291 > 0.05$ so it can be concluded the companies don't do earnings management one year before IPO (t-1) and the significant value is $0.740 > 0.05$ so it can be concluded the companies don't do earnings management one year after IPO (t+1).
2. From the hypothesis testing, the conclusion is there are differences of earnings management between IPO and one period after IPO. So hypothesis is accepted.
3. From the hypothesis testing, the conclusion is that there are no differences of earnings management between IPO and one period after IPO. So hypothesis rejected.
4. From the hypothesis testing, the conclusion is that there are no differences of earnings management one period before IPO and one period after IPO. So the hypothesis rejected.

Limitation

Limitation of this research is only used the 5 - year period of sample in collecting data.

Suggestion

- 1) Based on the result, there are differences in earnings management in one period after IPO and during IPO because the companies make more higher earnings management during IPO so the investors have to make a good selection in choosing the best alternative companies during IPO.
- 2) Future research can add more variables and more samples during IPO, such as size, profitability ratio, solvability ratio.

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