

# The effects of information asymmetry, earning management, voluntary disclosure and market value of equity on cost of equity capital

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## ABSTRACT

This study aims to examine the effect and prove that (1) the higher of the information asymmetry, the higher of the cost of equity capital, (2) the higher of the earning management caused the higher of the cost of equity capital, (3) the higher of the voluntary disclosure caused the lower of the cost of equity capital and (4) the higher of the market value of equity caused the lower of the cost of equity capital. This research was conducted in the manufacturing companies sector listed on Indonesian Stock Exchange (IDX) in 2012-2014. This study used a purposive sampling method for getting sample. The data were analyzed using Multiple Linear Regression Analysis with one-tailed test with SPSS 22.0 program. The results show that market value of equity were statistically supported or hypothesis accepted. While the information asymmetry, earning management and voluntary disclosure were not statistically supported, although the information asymmetry had a significant effect but the hypothesized results were different so the hypothesis remains rejected.

## ABSTRAK

Penelitian ini bertujuan untuk menguji dan membuktikan arah hipotesis variabel asimetri informasi, manajemen laba, pengungkapan sukarela dan nilai pasar ekuitas terhadap cost of equity capital. Hipotesis yang diajukan antara lain (1) asimetri informasi berpengaruh positif terhadap cost of equity capital, (2) manajemen laba berpengaruh positif terhadap cost of equity capital, (3) pengungkapan sukarela berpengaruh negatif terhadap cost of equity capital dan (4) nilai pasar ekuitas berpengaruh negatif terhadap cost of equity capital. Penelitian ini dilakukan pada perusahaan sektor manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) pada tahun 2012-2014. Pemilihan sampel menggunakan Purposive Sampling. Metode analisis yang digunakan adalah pengujian Asumsi Klasik dan Analisis Regresi Linear Berganda menggunakan pengujian 1 arah ( $\alpha = 0,05$ ) dengan program SPSS 22.0. Hasil penelitian menunjukkan bahwa nilai pasar ekuitas didukung secara statistik atau hipotesis diterima. Sedangkan asimetri informasi, manajemen laba dan pengungkapan sukarela tidak didukung secara statistik, meskipun variabel asimetri informasi berpengaruh signifikan tetapi hasil arah yang dihipotesiskan berbeda sehingga hipotesis tetap ditolak.

## 1. INTRODUCTION

Business competition becomes the motivation for the company's management to show the company's best performance. Therefore, companies need additional funds from external parties such as investors. In getting the external fund, there are some costs incurred by the company such as audit fees and dividend costs. Costs incurred for external benefits

at the cost of equity capital.

According to the theory of Botosan (1997), the cost of capital or cost of equity capital is the rate of return (return) desired by the investor or as the level used by investors in predicting future cash as measured by earnings per share.

Murwaningsari (2012) stated that there are several factors that affect the cost of equity capital.

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The existence of supporting theories and the phenomenon of the issues that occur to make researchers interested in re-examining the theory. In addition, information asymmetry arises when managers are more aware of the internal information and the company's prospects in the future compared to shareholders (Jensen and Meckling 1976). The higher of information asymmetry can add to the uncertainty of the results obtained by investors because of the higher risk resulting in increased cost of equity capital (Perwira 2015).

Information asymmetry between the management (agent) and the owner (principal) can provide an opportunity for managers to make earnings management. Earnings management is an action taken by management to maximize profit or minimize profit. The higher, the earnings management the higher the uncertainty of the results obtained by investors because of the higher risk resulting in increased cost of equity capital (Chancera 2011).

One of the factors affecting cost of equity capital is voluntary disclosure. Voluntary disclosure is one way to improve the credibility of financial statements. The higher of voluntary disclosure can reduce the uncertainty of the results obtained by investors because of the lower risk resulting in decreased cost of equity capital. Another factor that affect cost of equity capital is the market value of equity. The market value of equity is one of the variables that describes the size of a company. The higher the value of the equity market signifies the larger the size of the firm because more information is disclosed meaning its risk is smaller resulting in decreasing cost of equity capital (Murni 2004)

## 2. THEORETICAL FRAMEWORK AND HYPOTHESES

Signal theory explains how a company should have the impetus to provide a signal in the form of financial statement information to external parties. According to Wolk, et al. (2001) signal theory provides signals to users of financial statements in the form of information that has been done by management to realize the desire of the owner. The signaling is intended to reduce the information asymmetry so that there is no information is hidden. One type of information issued by the company that can be a signal for parties outside the company, especially for the investor is the annual financial statements.

Jensen and Meckling (1976) describe the agency relationship as a contract in which one or more people principally instructs another agent to perform a service on behalf of the principal and au-

thorizes the agent to make the best decision for the principal. Oktavia (2016) explains that agency theory emphasizes different interests between managers and shareholders because managers have more information about the company than the shareholders can lead to an imbalance of information.

Modigliani and Miller (1958) explain that the cost of capital is the cost incurred to finance the source of expenditure so that it is the required rate of return on various types of funding and one of them is the cost of equity capital. According to Botosan (1997) the cost of equity capital can be regarded as the rate of return desired by investors or as the rate used by investors in predicting future cash flows as measured by earnings per share. According to James C. Van Horne & John M. Wachowicz (2004: 127), Cost of equity capital is included in the component of the cost of capital. Capital costs are calculated on the basis of the long-term sources of funds available to companies such as the Cost of Debt, Preferred Stock Cost, the Cost of Equity Capital and the Retained Earnings. According to Botosan (1997), the cost of equity capital measurement uses Ohlson's model to estimate the value of the firm by basing on the book value of equity plus the cash value of the abnormal profit calculated based on the discount rate and used by investors to estimate future cash flow.

Information asymmetry is a situation that occurs when one of the transacting parties knows more information about the company than the other party, thus increasing the uncertainty of the results that will be received by one of the investors in the future. The higher the information asymmetry between market participants will result in greater transaction costs and lower liquidity. Low market liquidity leads to a decline in stock prices. To cover the losses the stock owner will raise the selling price resulting in an increase in the spread. This is reinforced by the disclosure of Botosan (1997) that the increase in bid-ask spread of stock is a reflection of the desired increase in return. The higher bid-ask spread causes the investor to raise the expected rate of return in his investment so that the cost of equity capital increases.

Earnings management is one of the actions undertaken by management that can reduce the level of credibility of financial statements by maximizing profits or minimizing earnings. According to Scoot (2009:403) Earning management is defined as an opportunistic act in the sense that a manager has the opportunity to choose one of the accounting policies or actions that affect the earnings to achieve certain goals in reporting the earnings.

Dechow et.al (1995) examines the causes of the consequences of the action of earnings management which one of them is to know the extent of the impact of earnings management on cost of equity capital. The results showed that the higher the accrual rate, the higher the level of risk and the uncertainty of payments to be received by investors so that the consequences investors will raise the expected rate of return in investment. This causes the higher the level of earnings management, and also the higher the cost of equity capital. Detection of the possibility of earnings management in the financial statements is generally examined through the use of accruals. Accruals are the main components of profit-making and accruals that are made on the basis of certain estimates. According to Dechow et.al (1995) The Modified Jones Model is the best model in detecting earnings management since this model is time series and statistically best compared to other models.

Voluntary disclosure is a one of the way to disclosure by a company outside what is required by the accounting standards or regulatory body regulation established by the competent authority Bapepam LK (now the Financial Services Authority). Policies on mandatory disclosure have been regulated through KEP-431 / BL / 2012 regulations. However, the regulation has been revoked and declared invalid from 1 January 2017 and replaced by the latest regulation of OJK number 29 / POJK.04 / 2016. As for the voluntary disclosure there is no regulatory policy so that the items disclosed refers to the standard criteria in the Annual Report Award assessment annually organized by the Financial Services Authority. Healy and Palepu (1993) explain that voluntary disclosure as a way to increase the credibility of the company's financial statements and to assist investors in understanding the company's business strategy. This is also reinforced by the theory of Diamond and Verrechia (1991) in Botosan (1997) which explains that the higher disclosure made by firms as a signal given to investors will the lower transaction costs in this case bid-ask spreads and risks established by the investor to the company that will eventually lower the cost of equity capital.

The market value of equity is one of the measuring tools that can calculate the present value of all future cash flows to be obtained by shareholders to describe the size of a company. Hussey (1999) stated that the market value of equity is measured using market capitalization value in one month before the announcement of the company's annual report. By knowing the value of the equity market,

we can compare the market capitalization value of each company analyzed. In general, beginner investors are advised to buy stocks of companies with relatively large market capitalization value because in investing investors tend to rate companies based on their size. The higher the stock price of a company in the market and the more number of shares circulating in the market will make the market capitalization value bigger.

### **Relationship between Information Asymmetry and Cost of Equity Capital**

Asymmetry of information will result in high level of risk that will be faced by investors because of the amount of information that is hidden so that to increase the uncertainty of results that will be received by investors in the future. This is reinforced by the agency theory of Jensen and Meckling (1976) which is that information asymmetry arises when managers know more about the interstitial information and future prospects of the company than shareholders and other stakeholders (principal). This is reinforced by the disclosure of Botosan (1997) that the increase of stock bid-ask-spread is a reflection of the desired increase in return. Research of Botosan (1997) and Purwanto (2012) are able to prove that information asymmetry has a positive and significant impact on cost of equity capital. The higher the information asymmetry can increase the uncertainty of yield obtained by investors resulting in increasing cost of equity capital. Based on the above description, it can be formulated hypothesis as follows:

H1: the higher information asymmetry leads to the higher cost of equity capital or information asymmetry has positive effect on cost of equity capital

### **Relationship between Earning Management and Cost of Equity Capital**

Earnings management is a management effort to maximize or minimize profit whis is that manager select accounting policies in order to certain goals in reporting earning (Scott, 2009 : 403). This is reinforced by Dechow et.al (1995) research that examines the causes of the consequences of profit manipulation action, one of which is to know the extent of profit manipulation impact on cost of equity capital. The higher the accrual rate, the higher the level of risk and the uncertainty of payments that will be received by the investor so that the consequences investors will raise the expected rate of return on investment. This causes the higher the level of earnings management, then the higher the

cost of equity capital. With the management of earnings, investors react by increasing the required rate of return which results in increased cost of equity capital. Based on the above description, it can be formulated hypothesis as follows:

H2: the higher earning management leads to the higher cost of equity capital or earning management has positive effect on cost of equity capital

### Relationship between Voluntary Disclosure and Cost of Equity Capital

Differences of interests between managers, shareholders and creditors result in managers tend to hide or not disclose information they know. This is reinforced by the theory of Diamond and Verrechia (1991) in Botosan (1997) which explains that the increasing disclosure made by firms as a signal given to investors will lower transaction costs in this case bid-ask spreads and risks set by investors to the company that will eventually lower the cost of equity capital (cost of equity capital). Based on research Khomsiyah (2003) also can be concluded that the disclosure (disclosure) negatively affect the cost of equity capital. This is because the high level of disclosure in a company can reduce investor uncertainty over the risk of information so that the cost of equity capital will be smaller. Based on the above description, it can be formulated hypothesis as follows:

H3: the higher voluntary disclosure leads to the lower cost of equity capital or voluntary disclosure has negative effect on cost of equity capital

### Relationship between Market Value of Equity and Cost of Equity Capital

According to Jimanto (2009) companies with large market value of equity have the ability to generate greater profits due to the breadth of opportunities to obtain funds from internal and external parties. This is reinforced by the theory described by Hussey (1999) that the higher the stock price of a firm in the market and the greater number of shares circulating in the market will make the larger the market value of the equity. The higher the market value of equity signifies the larger the size of the company because more information is disclosed means the risks to be faced by the smaller investors resulting in the decline in cost of equity capital.

Murni (2004) and Jimanto (2009) prove the negative effect between market value of equity and cost of equity capital that the greater the market value of a company's equity, the cost of equity capital

of the company will also be lower because along with the decreasing of estimation rate the risk to the firm will cause the cost of equity capital demanded by the investor also to be lower. Based on the above description, it can be formulated hypothesis as follows:

H4: the higher market value of equity leads to the lower cost of equity capital or market value of equity has negative effect on cost of equity capital

## 3. RESEARCH METHOD

The type of data used in this study is secondary data. Secondary data sources in this study are annual financial statements in manufacturing companies during the period 2012 to 2014 with a total period of 3 years. However, the annual financial statement data for the period of 2015 is only used to measure the cost of equity capital for the period of 2014 as well as the annual financial statements of the 2011 period to measure earnings management, particularly the total assets, income and receivables procured by discretionary accrual using The Modified Jones Model for the period of 2012.

The sample in this research is taken using purposive sampling technique. Criteria for sample selection are as follows (result of sample selection is presented in Table 1):

1. Classified as manufacturing companies listed on The Indonesia Stock Exchange year 2012-2014
2. Published annual report with audited financial statement year 2012 - 2014
3. Financial statement presented in Rupiah
4. Companies always report earnings

### Operational Definition Variables

#### Variable of Cost of Equity Capital (Y)

The calculation of the cost of equity capital of each sample company by using the residual income model better known as Edward Bell Ohlson valuation developed by Edwards and Bell (1961), Ohlson (1995), Feltham and Ohlson (1995), and Botosan (1997):

$$r = \frac{(B_t + X_{t+1} - P_t)}{P_t}$$

Notes:

r : Cost of equity capital

Bt : The book value per share at the date of publication of annual report

X<sub>t+1</sub> : Earnings per share period t + 1

Pt : closing stock price at the date of publication of annual report.

The book value per share is calculated by the formula of total shareholder equity data divided by the number of shares outstanding that can be obtained on the statement of financial position of the compa-

ny. Profit-per-share data can be obtained in the company's comprehensive income statement while closing stock price data can be obtained in the annual stock price overview or through the Nexus

**Table 1**  
**Sample Selection**

Research Sample Criteria	Amount
Manufacturing companies listed on the Stock Exchange in 2012 as many as 131 companies, in 2013 as many as 137 companies and in 2014 as many as 139 companies.	407
Manufacturing Companies that are not listed on the Indonesia Stock Exchange continuously during the period of 2012-2014.	(263)
Manufacturing Companies that do not publish financial statements continuously in the period 2012-2014	(13)
Manufacturing Companies that lose during the period 2012-2014	(37)
Manufacturing Companies that do not use Rupiahs in the financial statements for the period 2012-2014	(18)
Manufacturing Companies that do not publish complete financial statements as research data in the period 2012-2014	(18)
Number of companies studied	30
<b>Total Sample (30 x 3 years)</b>	<b>90</b>

#### Chart application.

#### Variable of Information Asymmetry (X<sub>1</sub>)

Information Asymmetry is an information imbalance between managers and shareholders. Information asymmetry is measured by a bid-ask spread model with a ratio scale. In calculating the amount of bid-ask spread in this study using the model used Botosan and Plumlee (2001) are:

$$SPREAD_{it} = \frac{(ask_{it} - bid_{it})}{\left(\frac{ask_{it} + bid_{it}}{2}\right)} \times 100$$

Notes:

Ask<sub>i,t</sub> : highest ask price of stock of company i that happened on t-day (on publication date of the annual report)

Bid<sub>i,t</sub> : the lowest bid price of the company stock i that occurred on t-day (on publication date of the annual report)

Ask price is the price of interest by the seller to conduct stock transactions and the bid price is the price of interest by the buyer to conduct a stock transaction. Highest ask price data and lowest bid stock price can be obtained through [www.ticmi.co.id](http://www.ticmi.co.id) website or through Nexus Chart application.

#### Variable of Earning Management (X<sub>2</sub>)

Based on Dechow et al. (1995), the Modified Jones

Model discretionary accruals model provides stronger results for earnings management measurement. There are 4 stages in calculating earnings management with the following steps:

1. Calculating the total accrual

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

2. Calculating the total accrual

$$\frac{TA_{it}}{A_{t-1}} = \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left( \frac{\Delta REV}{A_{t-1}} \right) + \alpha_3 \left( \frac{PPE_{it}}{A_{t-1}} \right)$$

3. Determining Non-discretionary accrual

$$NDA_{it} = \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left( \frac{(\Delta REV_{it} - \Delta REC_{it})}{A_{t-1}} \right) + \alpha_3 \left( \frac{PPE_{it}}{A_{t-1}} \right)$$

4. Determining Discretionary Accrual

$$DA_{it} = \left( \frac{TA_{it}}{A_{t-1}} \right) - NDA_{it}$$

Notes:

TA<sub>it</sub> : Total Accrual of company i in year t

NI<sub>it</sub> : Net income of cash from the operating activities of company I in the period of t

CFO<sub>it</sub> : Cash Flow from operating activities of company I in the period of t

A<sub>t-1</sub> : Total Assets of company i at the end of period t-1

ΔREV : changes in the earning of company I in the year t

- PPE<sub>it</sub> : *property, plant and equipment (gross)* year t  
 $\alpha_1, \alpha_2, \alpha_3$  : regression coefficients  
 NDA<sub>it</sub> : *Non- Discretionary Accrual* in year t  
 $\Delta$ REC : changes in the net receivable of company I in the year t  
 DA<sub>it</sub> : *Discretionary Accrual* in year t

### Variable of Voluntary Disclosure (X<sub>3</sub>)

The number of disclosure items used by previous researchers initially amounted to 33 items of disclosure. However, of the 33 items of disclosure, only 26 items of disclosure can be used because some other items have included the required disclosure items. The voluntary disclosure index represents the extent of disclosure of information in a company's financial statements in accordance with the following provisions:

- Scoring for each item of voluntary disclosure is done dichotomously, where the item disclosed is assigned a value of one (1), while if the item is not disclosed it is rated zero (0).
- Scores earned by each company are added to get a total score.

The measurement of the company's voluntary disclosure index is done by dividing the total score of each company by the expected total score.

$$\text{Index} = \frac{\text{Amount of Disclosure score}}{\text{Maximum score of Disclosure}}$$

### Variable of Market Value of Equity (X<sub>4</sub>)

The market value of the company's equity is measured using the market capitalization value in one month before the announcement of the company's annual report. In calculating the market value of equity in this study using the model used Hussey (1999), Ibrahim et. Al (2004) and Sabrina (2008):

$$\text{NPE} = \frac{\text{Amount of Shares Outstanding}}{\text{Closing Stock Price}}$$

### Analysis Method

The analysis was done using a classical assumption test that is the normality test, multicollinearity test, heterocedasticity test, and autocorrelation test. Data analysis technique used in this research is multiple linear regression analysis with using the feasibility test of the model (F-test).

### Hypothesis Testing Techniques

The hypothesis in this study is tested using an individual parameter test (t-test) to determine the influence between variables. The direction of the hypothesis is known to use **one-tailed-test** hypothesis. Ac-

cording to Suyono (2015) One-tailed or 1-tailed is used for hypotheses that have a clear positive or negative direction so that the purpose of this study is not only to determine whether or not the relationship between variables X with variable Y, but further than that is to prove whether the relationship between variable X with Y is positive or negative.

### T Statistic Test

According to Suyono (2015), the formulation of the hypothesis for one-tailed-test resulted in the following description:

- To test the negative effect or if known negative  $\beta$  value, then the hypothesis formula is:  
 $H_0 : \beta \geq 0$  ( $\beta$  is greater or equal to zero), meaning that partially there is no effect, or there is positive effect between variable X to variable Y  
 $H_a : \beta < 0$  ( $\beta$  is smaller than zero), meaning that partially there is negative effect between variable X to variable Y
  - To test the positive effect or if the positive  $\beta$  value is known then the hypothesis formula is:  
 $H_0 : \beta \leq 0$  ( $\beta$  is smaller or equal to zero), it means that partially there is no effect, or there is negative effect between variable X to variable Y  
 $H_a : \beta > 0$  ( $\beta$  is greater than zero), meaning that partially there is positive effect between variable X to variable Y
- A significant level of using 5% (0.05) means the error rate is only tolerated at 5%. In one-tailed-test the significance level of  $\alpha$  is not divided into two ( $\alpha = 0.05$ ).

## 4. DATA ANALYSIS AND DISCUSSION

Table 2 shows that the testing model has been free from the problem of normality, multicollinearity, heterocedasticity and autocorrelation.

### Normality test

Based on the P-Plot chart, the SPSS program, it shows that the pattern is normally distributed, thus fulfilling the assumption of normality. However, in the residual normality test with graphics, it can be misleading if not careful because it visually looks normal. For more convincing, the test graph is necessary to do statistical test by using statistical test non parametric Kolmogorov-Smirnov (K-S). Based on the results of the data (table 1) with the SPSS program, the value of Asymp. Sig (2-tailed) > probability number or 0.332 > 0.005 means the regression model is normally distributed.

### Multicollinearity Test

The results as shown in Table 1, it indicates that all

independent variables have VIF values less than 10 and tolerance of more than 0.10. It can be concluded that there is no multicollinearity between independent variables in the regression model.

#### Heterocedasticity Test

Based on the scatterplot graphic display from the SPSS program results it can be seen that the spots spread from above and below the number 0 on the Y axis and did not form a certain pattern so it can be concluded that in this regression model did not occur heterocedasticity. From the graph, heterocedasticity test was done by statistical test that is one of them with Spearman's Rho correlation coefficient test. As shown in Table 2, that the correlation value of the four independent variables with Unstandardized Residual has a significance value of more than 0.05. Since of the significance is higher than 0.05, it can be concluded that there is no problem of heterocedasticity on the regression model.

#### Autocorrelation test

Based on the results on table 2 if the data with SPSS program then obtained Durbin-Watson value of 2.097. Furthermore, through Durbin-Watson table test dL and dU with 5% significance (0,05) obtained value as follows:

1. The value of DW table for dU ( $G; k; n$ ) = (0,05 ; 4 ; 90 ) = 1,751
2. The value of DW table for dL ( $G; k; n$ ) = (0,05 ; 4 ; 90 ) = 1,566

Since the Durbin Watson test value  $dU < DW < 4-dU$  is  $1.751 < 2.097 < 2.249$ , it can be concluded there is no autocorrelation.

#### Result of Multiple Linier Regression Analysis

The result of multiple linear regression analysis are shown in table 3. Based on the results of data processing with SPSS program, the regression equation used in this study is as follows:

$$Y = 5,336 - 0,017 IA + 0,017 ML - 0,222 PS - 0,0188 NPE$$

#### Correlation Coefficient Test (R)

Based on Table 2, if the program SPSS obtained R value of 0.720 which means a strong relationship between independent variables of information asymmetry, earnings management, voluntary disclosure and market value of equity to the dependent variable is cost of equity capital.

#### Determination Coefficient Test ( $R^2$ )

The Adjusted R Square is 0.495. It shows that the variable of cost of equity capital which can be explained by four independent variables: information asymmetry, earnings management, voluntary disclosure, and market value of equity equal to 49,5% while the rest 50,5% were by other factors outside model .

#### Analysis Variance (Uji F)

Based on testing criteria from the results of data processing with SPSS program can be seen that  $F_{count} \geq F_{table}$  or  $22,839 > 2,479$  ( $H_0$  rejected). So it can be said that the variable of information asymmetry, earnings management, voluntary disclosure and market value of equity as together have a significant effect on cost of equity capital.

**Table 2**  
**Result of Classical Assumption Test**

Model	Normality	Heterocedasticity (Sig)	Multicollinearity		Auto-correlation
			Tolerance	VIF	
IA	.332	.443	.916	1.091	2.097
ML		.411	.988	1.012	
PS		.887	.984	1.016	
NPE		.087	.917	1.091	

Source: Processed data, 2017

#### Significance Analysis (t test)

##### Information Asymmetry (X1)

Based on table 3 , it can be seen that - tcount <- ttable or  $-2,220 < -1,663$  and significance value (sig .0,029 < 0,05) so  $H_0$  is rejected meaning information asymmetry has significant negative effect to cost of equity capital. To determine the direction of the hypothesis, beta shows the number -0,175 means the direction of

the information asymmetry variable has negative direction ( $H_a$  accepted) it means that this variable is unidirectional with direction variable of the hypothesis so that the hypothesis is rejected ( $H_1$  rejected). This study supports previous research from Indayani and Mutia (2013) and Putri (2013) which shows information asymmetry has a negative effect on cost of equity capital, which means any decrease in information asymmetry will increase cost of equi-

ty capital. However, this is contrary to previous research from Purwanto (2012) and Perwira (2015)

which states that information asymmetry has a positive effect on cost of equity capital.

**Table 3**  
**Result of Multiple Linier Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Colonearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	5.336	0.721		7.399	0		
IA	-0.017	0.008	-0.175	-2.22	0.029	0.916	1.091
ML	0.017	0.653	0.002	0.026	0.979	0.988	1.012
1 PS	-0.222	0.534	-0.032	-0.416	0.679	0.984	1.016
NPE	-0.188	0.02	-0.751	-9.543	0	0.917	1.091
<b>R/Adj R2</b>	= 0.720 /0.495			<b>F</b>	= 22.839		
<b>df</b>	= n-k = 90-5 = 85			<b>Sig.</b>	= 0.000		

Source: Processed data, 2017

### Earning Management (X2)

Based on table 3, it can be seen that t-count  $\leq$  t-table or  $0,026 \leq 1,663$  and significance value (sig 0,979 > 0,05) so that H0 accepted and Ha rejected. It means that earnings management have no significant effect to cost of equity capital. Hence the hypothesis is rejected (H2 is rejected). This study is consistent with previous studies by Ifonie (2012) and Perwira (2015) they stated that there is no significant relationship between earnings management behavior and cost of equity capital. However, the results of this study different from those of Utami (2005), Tarjo (2010) and Chancera (2011) who found a positive effect and Oktavia (2016) found a negative effect between earnings management and cost of equity capital.

### Voluntary Disclosure (X3)

Based on table 3, it can be seen that - ttable  $\leq$  - tcount or  $-1,663 \leq -0,416$  and significance value (sig 0,679 > 0,05) so that H0 accepted and Ha rejected meaning voluntary disclosure does not have significant effect to cost of equity capital. Hence the hypothesis is rejected (H3 is rejected). The results of this study support the results of research Botosan (1997) and Murni (2004) which did not find the effect of voluntary disclosure rate to cost of equity capital. However, the results of this study contradict the Khomsiyah (2003) and Putri (2013) which found that there is a significant relationship between voluntary disclosure and the cost of equity capital.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

First, the results showed that information asymmetry has a significant negative effect on cost of equity capital. That means the decline in information asymmetry leads to an increase in cost of

### Market Value of Equity (X3)

Based on table 3, it can be seen that - t-count  $<$  - t-table or  $-9,543 < -1,663$  and significance value (sig. 0,000 < 0,05) so that H0 is rejected. It means that market value of equity has significant negative effect to cost of equity capital. To determine the direction of the hypothesis, beta shows the number -0.751 means the direction of the market value of equity variable has negative direction (Ha accepted) it means that this variable is directional with direction variable of the hypothesis so that the hypothesis is accepted (H4 accepted). This is in line with Hussey's (1999) theory and is consistent with previous research from Murni (2004) which concludes that the greater the market value of equity, the cost of equity capital of the company will also be smaller as it decreases the risk estimation rate of the firm will cause the rate of return demanded by the investor also becomes lower. The results of this study support the results of Murni's research (2004) which found that the market value of equity has negative effect to the cost of equity capital. However, the results of this study contradict with Meythi et al (2012) and Silalahi (2015) which found no relationship between the market value of equity and the cost of equity capital.

equity capital. The lower the information asymmetry will result in the smaller bid-ask spread of a stock. The lower bid-ask spread value means the more liquid the stock means the difference in the highest selling price and the lowest purchase price is not too high so many investors are interested to

transact of a stock. The decrease in bid-ask spread is a reflection of the expected return of investors. The increasing demand for stocks, the more liquidity of stock increases because the number of shares has a low price. The higher interest of investors to invest will increase the liquidity of shares and result in a change in trading activity. Increased trading activity will raise the stock price, resulting in an expected return on investment (cost of equity capital).

Second, the results show that earnings management does not significantly affect the cost of equity capital. It means that the size of the behavior of earnings management does not determine the increase or decrease in cost of equity capital because investors have anticipated the existence of earnings management by the company, so investors not only see the results of reports Finance or trust profit figure alone but look at other factors both financial and non-financial in making decisions to invest funds in the company. Company management does not have to manipulate earnings to get external financing because the proxy describes that cost of equity capital is also not related to the behavior of managers to make earnings management against the company.

Third, the results show that voluntary disclosure does not significantly affect the cost of equity capital. It means that the lower disclosure made by the company does not result in an increase or decrease in cost of equity capital because investors tend not to be able to respond to information carefully with additional information beyond mandatory disclosure. Another reason is that corporate disclosure is still largely inadequate when viewed from the level of detail, timeliness and clarity and there is no regulation of the Financial Services Authority related to voluntary disclosure. Another reason is that investors assume that manufacturing companies have better business prospects in the future assuming that investors will get more return on their investment, so that the available information is less getting the attention of investors.

Forth, the results show that the market value of equity has a significant negative effect on cost of equity capital. This shows that the greater the market value of equity shows that the greater the size of the company in the eyes of market participants so that investors assess the risks it faces will be smaller because of the large number of information about the company than the small scale companies.

Investors have a high confidence in the company for their investment and assess the risks they will incur less, thereby reducing the uncertainty of

future results and resulting in a decrease in cost of equity capital.

## Suggestion

### For Users of Financial Statements

For users of financial statements is expected not only focus on the company's earnings information, but also see the financial condition and non-financial companies in making investment decisions. In this case the cost of equity capital because it can show the rate of return of funds invested.

### For Further Research

- This study only included four variables affecting cost of equity capital that is information asymmetry, earnings management, voluntary disclosure and market value of equity. It is hoped that further research can use several variables other than these four variables such as Intellectual Capital, Beta Stock, Company Size etc.
- It is expected that subsequent research may develop voluntary disclosure items used as there is still considerable variation in disclosure by sample companies not covered by voluntary disclosure items in this study.
- It is hoped for further research to increase the period or extend the observation period of the research to reveal different results.
- It is hoped that further research will not only focus on one sector, ie in manufacturing companies only.

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