COST OF EQUITY CAPITAL AND REAL EARNINGS MANAGEMENT ON LISTED COMPANIES IN LQ-45 AND JAKARTA ISLAMIC INDEX

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ABSTRACT

This current issue of the changes in earnings management practice has moved on accrual earnings management to earnings management based on real activity. Earnings management practices had done by manager has positive perspective. investors realize that earnings management practices carried out by the issuer, so they will do anticipate risk by raising the estimated rate of return on stocks required. Therefore, earnings management will tend to increase the company's cost of equity capital. The previous study results prove that earnings management has a positive significant impact on the cost of equity capital, so that the higher the level of earnings management, the higher the cost of equity capital. It occurs because investors will increase the required rate of return. Generally, this study aimed to analyze the effect of real earnings management, company size and stock liquidity on the cost of equity capital. The research sample is 259 companies listed in LQ-45 and 208 companies listed in Jakarta Islamic Index (JII) during the 2004-2015 periods. The sample selected by purposive sampling. The analysis showed that the real earnings management, stock liquidity do not significantly effect on the cost of equity capital, while the company size significantly effect on the cost of equity capital. The findings showed that earning management was being done by managers to manipulate the stakeholders which made earning opacity. The real earning management did not increase significantly the cost of equity capital. It means that earning management with positive perspective are not supported.

Keywords: real earnings management, positive perspective, cost of equity capital.

Introduction

Investors are always looking to get compensation for their investment in the form of dividends and capital gains. As a consequence, the company must provide returns that are economically increasing from the previous period. The return on investment which is expected for investors is the cost of equity capital. According Fakhruddin (2008: 42) cost of equity capital is a cost for companies that use ordinary shareholders 'funds, which are caused by investor`s expectations for return ownership of these shares. The cost of equity capital can also be considered as the desired level of funding in the company (Novianty, 2009). Meanwhile, according to Martono and Harjito (2008: 207) the cost of equity capital are costs incurred by companies which acquire funds by selling common stock. So the cost of equity capital is the cost incurred by the company to meet the level of return on investment expected by the investor for an investment that has the same risk.

The problem of measuring the cost of equity capital is still debate. To measure the cost of equity capital depends on the valuation model used by the company (Mandy, 2005). According Botosan and Plumlee (2000) Charisma (2006) used assessment models, which are Constant of growth valuation models; Capital Asset Pricing Model (CAPM); and Ohlson Model. However, the valuation model used in this paper is Ohlson Model because to estimate the value of the company should be based on the book value of and most researchers used Ohlson model. Ohlson (1995) presents a model that links the company's equity at book value and its market value. Dechow et al (1999) mentioned that the model Ohlson significantly improve on financial accounting research. Atyeh and Al Rashed (2015) states that the model Ohlson able to give a clear view of the financial situation base on the capital structure and performance in the capital markets. Furthermore, research conducted by Crae and Nilsson (2001), Choi et al (2001) in Sweden and the United States prove that the Ohlson model is applicable and efficient.

One of the factors that influence the cost of equity capital is earnings management. Earnings management performed by the manager is proxied by real earnings management. According to previous studies that investors are anticipating correctly the information associated with accruals. Utami (2005) prove investors realize that earnings management practices carried out by the issuer, then they will do anticipate risk by raising the estimated rate of return on stocks required (Dechow et al., 2000). Therefore, earnings management will tend to increase the company's cost of equity capital. Investors realized that earnings management practices carried out by the issuer, then they will do anticipate their risks by raising the level of stock returns are required. Research on the effect of earnings management on the cost of equity capital has been done by some previous researchers, including Utami (2005) and Chanrera (2011). Their results prove that earnings management has a positive significant impact on the cost of equity capital, so that the higher the level of earnings management, the higher the cost of equity capital. However, research findings Kharisma (2006) states that the earnings management has negative impact to Cost of Equity Capital.

Company size is another variable that affected the cost of equity capital. Company size indicates the size of the available information. Risks in investment into the company will be increased, when information about the company and are usually difficult to obtain more information available to larger firms than smaller companies (Pure, 2004). The size of the company also has a correlation with the cost of equity capital. The larger the size of the company which is proxied by total assets, will have a smaller risk (Asbaugh and Collins, 2008). According Banz (1981), investors will demand a higher rate of return on a company that has a high risk. With a growing level of return expected by investors, the cost of equity capital issued by the company will also increase. Companies have to compensate for the level of return expected by investors by increasing dividend yield.

Previous studies have shown that the size have an effect on cost of equity capital. Annin (1997), Omran and Pointon (2004) and Kien Pham, Suchard and Zein (2005) got empirical evidence of firm size is negatively impacted to the cost of equity capital. Botosan (1997) stated that the size of the company's significant influence on the cost of equity capital. The research by Solechan (2009) found that company size has significantly influence on the cost of equity capital, because the cost of equity capital is the rate of return that should be generated by the company on the investment to maintain the value per share (Novianty, 2009).

Stock liquidity and risk are important consideration for investors when they invest the funds. In general, a stock is liquid when it can be bought or sold quickly with large quantities and stated the price (Pastor and Stambaugh, 2002).. So investors want a higher expected return when occured illiquid stocks transaction. This statement is also supported by Acharyaa and Pedersen (2005) which found that the expected return will grow in line with the level of market liquidity. The increasing in the expected return also means an increasing in the cost of equity capital issued by the company.

The previous research about earning management and cost of equity capital is inconsistent. Utami (2005) prove earnings management will tend to increase the company's cost of equity capital. Furthermore, Chanrera (2011) prove that earnings management has a positive significant impact on the cost of equity capital, so that the higher the level of earnings management, the higher the cost of equity capital. However, research findings Kharisma (2006) stated that the earnings management has negative impact to Cost of Equity Capital. The inconsistent results making the research for earning management and cost of equity was interesting. Previous studies analyzed earning management with opportunistic or negative perspective. Earning management doing by managers was getting their interest such as bonus, stock employee and good performance. The current research used the positive or efficient perspective. Earning management doing by managers will increase the expected rate of return by investors.

The current research about earning management also changed from accrual based to real activity. Graham *et al* (2005), Roychodwury (2006), Cohen *et al* (2008), dan Joosten (2012) proved for understanding real earning management beside management doing accrual earning mmanagement. Meanwhile Yu (2008), Zang (2012), Degeorge *et al* (2013) and Enomoto *et al* (2015) showed that companies are not only doing accrual earning management, but also doing real earning management based on situation faced by companies. So, the purpose of this study is to analyze the effect of real earnings management, company size and liquidity on the cost of equity capital in the listing companies in the LQ-45 index and JII (Jakarta Islamic Index).

Literature Review And Hypothesis

1. Earnings Management and Cost of Equity Capital

Earnings management is management intervention on the process of financial statements preparation that led to accounting earnings numbers will increase or decrease according to the interests desired by the manager. Generally, earnings management can be done in two ways, namely accrual earnings management and real earnings management (Graham et al., 2005), Roychodwury (2006), Cohen et al (2008), and Joosten (2012). The choice of earnings management method depends on the effectiveness cost of these methods, either accrual earning management or real activity (Enomoto, 2015).

Real Earnings management can be done in various ways. Roychowdhury (2006), Cohen and Zarowin (2010) states that real earnings management can be done in three ways: 1) increasing sales by providing discounts and take easier for getting credit; 2) Doing the production excessively so the fixed cost per unit is lower and leads to increase operating profit; 3) reducing the discretionary expenses such as advertising, administration and research - development costs.

Sunarto (2008) found earnings management resulted in the obscurity of information that will increase the risk of information. The increasing risk has an impact on increasing the information required rate of return set by the investor. The increasing in required rate of return is intended to cover the risk of information. If the the required rate of return is the basis for determining the dividend, so the increasing in the risk of information will increase the dividend. Brigham (1983) stated that the cost of equity is the amount of dividends paid by the companies. The earnings management practices will increase the cost of equity as the impact of the increase in the risk of information. The research conducted by Tsang and Edelstain (2009), and Vita and Rahmawati (2010) found that companies that have earnings management, the dividend pay out ratio is higher.

Relation with the asymmetric information which caused by earnings management practices, Bushman and Smith (2001) have identified three channels of the information would affect the cost of equity capital, namely: 1) the accounting information that will help investors in selecting good investment and decreasing the risk estimation followed by a decrease in the cost of equity capital; 2) a good accounting information will facilitate investors in selecting the good management that will reduce agency when followed by decreasing in the cost of equity capital; 3) the vagueness of information can lead to asymmetry of information that led to reduced liquidity so that the transaction costs will be enlarged. With the greater the transaction costs, the required return will be increasing.

Research about the effect of earnings management on the cost of equity had done by Dechow et al (1996), Utami (2005) and Valipour and Zerenji (2012) which have evidence that earnings management has positive influence on the cost of equity capital. So, the hyphotesis can be formulated:

H_1: Real Earnings management affects to Cost of Equity Capital

2. Company Size and Cost of Equity Capital

The size of the company is a scale for classifying large or small companies in various ways. Many researchers used log total assets (Marihot and Doddy, 2007), log total sales (Nuryaman, 2008), the average sales (Brigham and Houston, 2001) and market capitalization (Halim, et al., 2005).

The company size used as a variable in determining investment decisions. According to Jao (2012), holding a large-scale companies had broad interest of policy which impacted to the public interest and have implications for the future cash flow. Large companies considered to have reached the stage of maturity, the company was stable and has more ability to generate profits (Sugiarto, 1997). According Indriani (2005) the company has reached a stage of maturity. At this stage, the company has a positive cash flow and has good prospects in the future. Fama and French (1993), Ausbagh and Collins (2008) found that large size companies have a smaller risks. Companies can reduce the cost of debt interest payments and dividend payments so the cost of equity capital is also smaller.

Research conducted on the effect of firm size on the cost of equity capital found that firm size is negatively effects to the cost of equity capital (Annin 1997; Omran and Pointon, 2004; Kien Pham, Suchard and Zein, 2005). But from another perspective, the size of the company showed a stage of life cycle (Yan, 2005). It means that a large-sized enterprise has reached maturity cycle. (Sugiarto, 1997 and Indriani, 2005). At this stage the company is no longer doing massive business development so that the company's profit largely distributed to shareholders as dividends. Ree (1990) found that the size of the company's positive effect on the amount of the dividend payout ratio. Then, if the amount of the dividend is used as a component in calculating the cost of equity, the greater the dividends paid the greater will be the cost of equity. So the hyphotesis can be formulated:

H_2: The company size affects to cost of equity capital

3. Stocks Liquidity and Cost of Equity Capital

Generally, the stock is high liquidity if it can be sold quickly and in large quantities without significantly price changes (Butler et al, 2002; Bogdan et al, 2012; Kumar and Misra, 2015). This shows that the trade volume plays an important role in describing the level of liquidity of shares where trading volume suggests that the market is able to accommodate the sale of shares in large quantities without significant price changes. According to Butler et al (2002); Brigham and Michael (2011); and Hsu and Yu (2015) that the large trading volume illustrates the high level of liquidity of stocks.

The liquidity should be seen from the fourth dimension, namely the trading time, tightness, depth and resiliency (Wyss, 2004). Trading time is a dimension that is related to the ability to conduct stock transactions or other assets quickly and at a reasonable price. Tighness is the ability to trade assets at the same price and at the same time anyway. Depth is the ability to sell or buy shares or other assets without causing significant changes in the price. It describes the amount of trading volume that any shares are bought and sold by investors can be accommodated by the market. Resiliency is the ability to buy or sell certain assets without obtaining a significant influence on price quotations. If the depth of the market just used volume indicator at the time of bid or ask, the resiliency is also considering the elasticity of supply and demand. It is usually measured through intraday returns, variance ratio or liquidity ratio.

One of the reasons investors to invest in the stock market is the level of liquidity stocks. High liquidity means the investor is able to sell or buy the stock quickly and in large numbers. Diamond and Verecchia (1991) states that the high stock liquidity will attract large institutions traders to take a position and increase competition with the market maker who in the end will reduce the volatility of the company's stock price. With reduced volatility, the expected return is desired by the investor is lower.

Research Bekaert et al. (2006) showed that liquidity has a positive effect with the return. It means that the greater the degree of liquidity, the returns are also higher including the dividend yield. With a high dividend yield, the cost of equity is also getting higher. According to Foucault (2006) deficiencies in the level of liquidity will lead to higher transaction costs because investors can not sell or buy securities at the desired price. So they sell the securities at a lower price or buy securities at a high price. These losses included in the cost of the transaction. High transaction costs resulted in investors need higher returns to cover transaction costs. So the hyphotesis can be formulated:

H_3: Stocks Liquidity effects to cost of equity capital

Research Methods

1. Population and Samples

This population is a company listed in the JII and LQ 45 Indexs.The samples selected by purposive sampling method with the following criterias:

1. Companies listed in JII and LQ 45 index during 2004-2015 periods
2. Companies that publish their financial statements in ordered number during 2004 - 2015 periods.
3. Have the completed data used as variable measurement

2. Variables Measurement

Dependent variables

The dependent variable is the cost of equity capital that calculated by Ohlson or EBO model. Researchers chose this model because, Atyeh and Al Rashed (2015), found the Ohlson model is a leading model in linking the price of stocks, the book value and the cost of capital that are expected to be more representative in examining the relationship between the independent variables on the dependent variable. The EBO formulas can be describe as follow:

$$P_t = B_t + \sum_{\tau=1}^{T} (1+r)^{-\tau} E_t \{x_{\tau+1} - rB_{\tau+t-1}\} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

P_t : stock price at the year t
B_t : book value per share at year t
X_{t+1} : earning per share at year t+1
r : *cost of equity capital*

To estimate EPS at year t+1, used *Random Walk* model as follow:

$E(x_{t+1}) = x_t + \delta$ ……..... (2)

$E(x_{t+1})$: EPS estimated at year t+1
x_t : EPS actual at year t
δ :*Drift term* is the mean of EPS growth during 5 years.

For estimating earning the next period (t+1), used mean of EPS changing during 5 periods. So, the cost of equity capital estimated on formula (1) can be simply as follows :

$P_t = B_t + (1 + r)^{-1} [x_{t+1} - rB_t]$ ……..... (3)

x_{t+1} is EPS on year t+1 which estimated with *Random Walk* on formula (2). So the simply model will be describe on formula (4) as follow:

$(P_t - B_t)(1 + r) = (x_{t+1} - rB_t)$…….(4)

So, the cost of equity capital formula is :

$r = (B_t + x_{t+1} - P_t)/P_t$.....(5)

Independent variables

1). Real Earnings Management

Real earning management measured by Rychowdhury (2006); Idris (2012); Trisnawati, Wiyadi and Sasongko (2012); Masoumi and Tirkolaei (2013). The measurement used three proxies, they are abnormal cash flow operations, Abnormal production cost, and abnormal discretionary expenses. Abnormal CFO is operating cash flow manipulation that cause the lower cash flows than it should be, while the cost of production is the manipulation of abnormal production costs resulting the higher costs than the normal cost of production. The abnormal discresionary cost isn earnings manipulation through advertising costs, cost of sales and research development expenses. Abnormal costs used residual value which represents the difference between the estimated value of the company and the real value. These measurement can be formulated as follows:

1) *Abnormal CFO*
   $CFO_t/A_{t-1} = \alpha_0 + \alpha_1 (1/\text{Log } A_{t-1}) + \beta_1 (S_t/A_{t-1}) + \beta_2 (\Delta S_t/A_{t-1}) + \varepsilon_t$
2) *Abnormal Production Cost*
   $PROD_t/A_{t-1} = \alpha_0 + \alpha_1(1/\text{Log } A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_{t-1}/A_{t-1}) + \beta_3(\Delta S_{t-1}/A_{t-1}) + \varepsilon_t$
3) *Abnormal Discretionary Expenses*
   $DISC_t/A_{t-1} = \alpha_0 + \alpha_1 (1/\text{Log } A_{t-1}) + \beta_1 (S_t/A_{t-1}) + \varepsilon_t$
   Where:
   A t-1 = Total assets of the company at the end of the year t-1
   St= Total sales at the end of t
   ΔSt = Difference in sales this year with sales in year t-1
   ΔSt-1 = Difference in sales in year t-1 with sales in year t-2
   α, βt = regression coefficient
   εt = error

3). Stocks Liquidity

Liquidity describes the ability of a stock to be traded immediately, in large numbers and without significant changes in price. One of measuring the liquidity of the stock is to use the trading volume. (Butler et. al., 2002). Brigham and Michael (2011) explain that the trading volume or liquidity is the ability of a stock to make transactions quickly at reasonable price levels. Sunarto (2008) explains that trading volume can be measured using three methods, they are the amount of the transaction, the total value of shares as well as the number of shares traded. The Trading Volume Activity (TVA) is often calculated as the ratio between the total values of share traded divided the number of shares outstanding.

$$TVA = \frac{\text{Log Transaction value}}{\text{Log Market capitalization}}$$

3). Company size

The size of the company is a scale used to classify a large or small company. In this study, the size of the company is measured as nature log (ln) of total assets. This measurement refers to Lukani (2013); Swastika (2013); and Ali et al. (2015).

Hypothesis testing

To test the hypothesis, we used multiple linear regression analysis. It was used to predict the relationship or the effect of EM, liquidity and size to cost of equity capital. Multiple regression equation in this study was formulated as follows:

$$y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \varepsilon$$

Description :

y	: *cost of equity capital*
α	: constant
b_1, b_2, b_3, b_4, b_5	: regression coefficients
X_1	: *Abnormal CFO*
X_2	: *Abnormal Production Cost*
X_3	: *Abnormal Discretionary Expenses*
X_4	: Company size
X_5	: Stock Liquidity
ε	: *error*

Results And Discussion

Descriptive statistics

The description of real earnings management, company size, stock liquidity and cost of equity capital in companies listed in LQ 45 and JII indeks can be explained in Table 1.

Table 1. Descriptive Statistics

Variable	LQ 45 Index			JII Index		
	Min	Max	Mean	Min	Max	Mean
Abn. CFO	-0,530	0,884	0,008	-0,516	0,653	0,008
Abn. Pro. Cost	-1,916	0,739	0,001	-1,027	1,405	-0,003
Abn. Dis. Expenses	-0,175	0,698	0,003	-0,302	0,737	-0,001
Stock Liquidity	0,879	1,040	0,966	0,879	1,040	0,963
Company Size	11,219	14,372	13,154	11,756	14,330	13,130
Cost of Equity	-1,097	-0,764	-0,941	-1,132	-0,773	-0,943

Source: Secondary data was processed, 2016

From Table 1, it showed that the company listed in LQ45 and JII have a positive abnormal CFO. This means that earnings management is done by raising the operating cash flow. These operations can be done by making policies related to the sales, such as give the discount or reduce the terms of credit application, so the volume of sales increasing.

Abnormal production cost is the manipulation production to result the higher or lower valuethan normal production costs. In a company listed in LQ45 index, the average abnormal production costs is positive, so the earning management tends to raise the cost of production. While on company listed in the index JII earnings management performed by the lower production costs.

Discretionary Expenses are abnormal earnings manipulation through advertising costs, cost of sales as well as research and development expenses. Based on the descriptive statistics can be seen that the companies listed in the LQ 4, they did earning management with the pattern increasing the advertising costs, cost of sales and research and development expenses. While the companies are listed in the index JII, the earning management value has the pattern decresing advertising costs, cost of sales and research and development expenses.

Stock liquidity describes the ability of stocks to be traded immediately, in large numbers and without significant price changes. Based on the descriptive statistics can be seen that the companies listing in the LQ 45 index, the average liquidity of the shares is 0.966, it shows that the value of the average companies transaction listed in LQ 45 index is 96.6% of the entire market capitalization, While the companies listed in the JII index, the average companies transaction in JII index is 96.3% of the entire market capitalization.

The size of the company is proxied by the natural logarithm of total assets (log total assets). Based on the descriptive statistics, it shows that the companies listed in the LQ 45 index is 13.154. While the companies listed in the index JII is 13.130. This means that companies listed in LQ 45 and JII is classified the large companies.

Cost of equity capital is the rate of return that should be generated by the company on the investment to maintain the value per share. Based on the descriptive statistics showed that the companies listed in the LQ 45 and JII indeks have a negative value. This means that investors have expectations of return that will be accepted are low.

Hypothesis Testing and Discussion

Multiple regression analysis was conducted to prove the influence of independent variable to dependent variable. In this study, we used it to determine the effect of real earnings management, liquidity and size of the company to the cost of equity capital on listing companies in LQ 45 and JII indeks during 2004-2015 periods. The results the analysis can be seen in the following table:

Table 2
The Result of Regression Analysis

Variable	LQ 45 Index			JII Index		
	β	T_{count}	Prob	β	T_{value}	Prob
(Constant)	-0,488			-0,732		
Abn. CFO	0,029	1,324	0.187	0,018	0,744	0,458
Abn. Pro. Cost	0,026	1,582	0.115	0,008	0,523	0,602
Abn. Dis. Expenses	0,017	0,752	0.453	-0,024	-1,152	0,251
Stock Liquidity	-0,223	-1,762	0.079	0,227	1,654	0,100
Company Size	-0,018	-2,879	0.004	-0,033	-4,377	0,000
F value	3,596			5,109		
Prob	0,004			0,000		

Source: Secondary data was processed, 2016

From Table 2, the regression equation from these analysis can be seen follows

$Y = -0,488 + 0,029X_1 + 0,026X_2 + 0,017X_3 - 0,223\ X_4 - 0,018\ X_5 + e$ (1)

$Y = -0,732 + 0,018X_1 + 0,008X_2 - 0,024X_3 + 0,227\ X_4 - 0,033\ X_5 + e$ (2)

The result of hyphotesis testing to determine the effect of real earnings management, liquidity and size of the company to the cost of equity capital listed in LQ 45 and JII indexs were as follows:

Table 3.
Results of Hyphotesis Testing

Variable	LQ 45 Index			JII Index		
	T_{value}	Prob	Description	T_{value}	Prob	Description
Abn. CFO	1,324	0,187	H_{1a}Rejected	0,744	0,458	H_{1a}Rejected
Abn. Pro. Cost	1,582	0,115	H_{1b}Rejected	0,523	0,602	H_{1b}Rejected
Abn. Dis. Expenses	0,752	0,453	H_{1c}Rejected	-1,152	0,251	H_{1c}Rejected
Stock Liquidity	-1,762	0,079	H_2 Rejected	1,654	0,100	H_2 Rejected
Company Size	-2,879	0,004	H_3Received	-4,377	0,000	H_3Received

Source: Secondary data was processed, 2016

Earnings Management and Cost of Equity Capital

Based on the table 2 and 3, it showed that abnormal CFO did not significantly affect to the cost of equity capital, both on companies listed in LQ 45 and JII. It means that the manipulation earning by increasing the cashflow made by the manager had no effect on investor expectations of their return which they will receive. This is most likely due to more investor focused on the fundamentals of the company as a whole not only focusing on the company's current earnings. According to data released by Kustodian Sentral Efek Indonesia (KSEI) in 2015, institutional ownership companies in Indonesia reached 62.8%, it means the majority of investors in the Indonesian stock market is a institution investor. Froot et al (2000) stated that a major institutional investors have analytical skills good investment, it is not surprised on earning number, but they are more focused on the fundamentals of the company as a whole rather than just focus on the company's current earnings. The test of the effect abnormal production costs did not significantly on the cost of equity capital in companies listed in LQ 45 and JII. This shows that investor expectations of their return that will be received not influenced by real earning management which generated from producing goods over the normal production. Generally, the real earnings management activities by companies did not have enough loopholes to manipulate accrual (Ning, 2012). This is supported by studies conducted by Trisnawati and Nugroho (2011); Sasongko and Purbasari (2012); Wiyadi and Safitri (2012) who found that an accrual earnings management practices occur in companies listed in LQ 45 and JII. Finally, the abnormal discretionary expenses did not significantly affect to the cost of equity capital in both companies listed in LQ 45 and JII. It means that changes in the company's profit caused by manipulation on discretionary expenses did not affect the return expectations by investors.

The results showed that real earning management did not significantly affect the cost of equity capital in companies listed in LQ 45 and JII, So , the hyphotesis (H1) did not supporting. The results of this study consistent with Purwaningtias and Surifah (2015) who found that earnings management did not affect the cost of equity. Leuz et al. (2003) mentioned that Indonesia is in a group (cluster) countries with a weak level of investor protection. Joosten (2012) states the form earnings management, from

accrual earnings into real earning management due to high level of investor protection and the tight scrutiny of regulators, it is possible that in Indonesia the level of investors protection is still weak. The manager still focus on the manipulate earnings accrual rather than real earning management. Fitriyani (2004), Utami (2005), and Rinobel (2015) found that earnings management accrual has positive significantly effect on the cost of equity capital in the company.

Stocks Liquidity and Cost of Equity Capital

Based on the table above, the test results showed that the stocks liquidity did not significantly effect to cost of capital in companies listed in LQ 45 and JII indeks. the rating of stocks companies in Indonesia has high liquidity so their expectations of the returns are not affected by the low stock liquidity.This results consistent with Butler et al (2001) which states that liquidity is not related to the cost of equity capital. Stock liquidity is more related to the costs incurred by the company for its efforts to obtain external sources of financing. The companies with less stock liquidity have to pay more fees to investment bankers when the company issued new shares (rights issue). The less stocks liquidity tends to be avoided by investors and traders, because they get the high transaction costs and the emergence of difficulties in transactions.

The company size and Cost of Equity Capital

In this study, the company size is measured by the natural logarithm of total assets (log total assets). Based on the descriptive statistics, the companies selected on this study are large companies which the total assets more than 26 billion rupiahs.In JII indeks, the total asset is more than 13.49 billion rupiahs. The analysis showed that firm size has significantly effect to the cost of equity capital in companies listed in LQ 45 and JII indeks.The results consistent with Annin (1997); Omran and Pointon (2004) and Kien Pham, Suchard and Zein (2005). Ashbaugh-Skaife and Collins (2008) stated that in large companies, the expected return estimated by investors will be less than the smaller-sized companies. This reason is the large companies have more certainty about future prospects, low risk and more stable. While small companies are more at risk because they tend to inefficient, the high level of debt (leverage) and get low profitability so there is no certainty regarding the continuance in future. The size of this risk has an effect to the cost incurred by the company in obtaining capital. Large companies can reduce the cost of debt interest payments and dividend payments. This is due to large company has lower risk, so the expected return estimated by investors is also lower. The investors estimated that their return will be received as same as previous return, so the cost of equity capital is also lower.

Conclusion

The main focus of this research is to analyse the effect of the real earning management on cost of equity capital. This research would look at earning management from positive or efficient perspective, The earning management doing by managers would be increasing the rate of expected return for investors. Meanwhile the results found that the real arning management did not effect on *cost of equity. capital*. This findings had opposite with PAT theory. Earning management as a factors reduce the quality of financial reporting, because the information is not reliable (Setiawati dan Naim, 2000 dalam Rahmawati, 2006). Investor did not know about this situation, so investor did not anticipate by increasing the rate of return minimum that will be received. Investor had trust with information available from managers because government will intervence the companies with the rules. Ifonie (2012) stated that investor had anticipated earning management, but they did not look at from earning information only for investment decision. So, from investor perspective, earning management did not effect on expected return required by investors. This findings consistent with Ifonie (2011), Andriani (2013), Purwanto (2013). The findings also showed that company size had significantly effect to the cost of equity capital in companies listed in LQ 45 and JII (H3 supported). It means that large companies, the expected return estimated by investors will be less than the smaller-sized companies. This reason is the large companies have more certainty about future prospects, low risk and more stable for continuing its operations.

Limitations

1. The measurement of earnings management used real earnings management that has not been able to detect earnings management as a whole. The other measurement such as integrated earning management should be done the next research to detect earning management
2. The data variations used are very high considering the company's growth and breadth of information during the long periods (2004-2015).
3. The Ohlson model used to measure cost of capital. The other measurement such as Constant of growth valuation models; Capital Asset Pricing Model (CAPM) should be considered for the next studies

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Refferences

Acharya, V. dan Pedersen, L.H., 2005, Asset Pricing with Liquidity Risk, Journal of Financial Economics, London Business School, London.

Agus Harjito, Martono. 2008. Manajemen Keuangan, edisi 1.Yogyakarta: EKONISIA.

Ali, U., Muhammad Afzal Noor, Muhammad Kashif Khurshidd ans Akhtar Mahmood. 2015. *Impact of Firm Size on Earnings Management; A Study of Textile Sector of Pakistan.* European Journal of Business and Management Vol.7, No.28, 2015

Annin, Michael. 1997. *Fama-French and Small Company Cost of Equity Calculations*. Journal of Business Valuation Review

Ashbaugh-Skaife, H., Collins D.W., William R. Kinney Jr., Ryan La Fond. 2008. *The Effect of SOX Internal Control Deficiencies on Firm Risk and Cost of Equity.*

Atyeh, Mohammad H., danWael AL-RAshed. 2015. *Correlation among Cost of Capital, Book Values and Shares Prices: The Case of Kuwait Listed Companies*. Journal of Economics, Business and Management, Vol. 3, No. 1

Banz, Rolf W. 1981. The Relationship Between Return and Market Value of Common *Stock*. Journal of Financial Economics vol. 9, 3-18

Banz (1981). *Linear information models in residual income based valuation: A development of the Dechow, Hutton and Sloan empirical approach*. Lancaster University, 2001.

Brigham. 1983. *Fundamentals of Financial Management*. Third Edition. The Dryden Press.

Bogdan, Sinisa, Suzana Baresa dan Sasa I vanovic. 2012. *Measuring Liquidity on Stock Market: Impact on Liquidity Ratio*. Journal Tourism and Hospitality Management, vol 18 no. 2 183-193

Botosan, C.A. and Plumlee, M.A., (2001), "A Re-examination of Disclosure Level and the Expected Cost of Equity Capital", Journal of Accounting Research, Vol. 40, No. 1, pp. 21-40

Botosan, C & Plumlee, M 2000, 'DisclosureLevel and Expected Cost of Equity Capital: An Examination of Analysts' Rankings of Corporate Disclosure and Alternative Methods of Estimating Expected Cost of Equity Capital', Social Science Research Network Electronic Paper Collection, http://papers.ssrn.com/paper.taf?abstract_id=224385

Botosan, C. A. (1997). Disclosure Level and The Cost of Equity Capital. The AccountingReview, vol. 72, no. 3, pp. 323-349.

Chaney, Paul K., Debra C. Jeter dan Craig M. Lewis. 1998. *The Use of Accruals in Income Smoothing: A Permanent Earnings Hypothesis*. Journal of Quantitative Analysis of Finance and Accounting, Volume 6, pages 103-135

Cohen, Daniel A. dan Paul Zarowin. 2010. *Accrual-Based and Real Earnings Management Activities Around Seasoned Equity Offerings*. Journal of Accounting & Economics Vol. 50

Dechow et al. 1999. *An empirical assessment of the residual income valuation model*. Journal of Accounting and Economics, vol. 26, pp. 1-34, 1999.

Enomoto, M., Kimura, F.,Yamaguchi T. 2015. *Accrual Based and Real Earning Management: An International Comparison for Investor Protection.* Discussion Paper Series Kobe University.

Froot, Kenneth A., Paul G.J O'Connel and Mark S. Seasholes. 2000. *The Portfolio Flows of International Investors.* Journal of Financial Economics vol. 59

Joosten, Carmen. 2012. *Real earnings management and accrual-based earnings management as substitutes*. Master Thesis of Department Accountancy Faculty of Economics and Business Studies Tilburg University.

Kien Pham, P., Suchard J.A., Zein, J. 2005. *Corporate Governance, Cost of Capital and Performance: Evidence from Australian Firms*. available at: http://ssrn.com/abstract=1015986 diaksespada 2 April 2016

Kothari, S.P., Mizik, N., Roychodwury, S., 2012. *Managing for the moment: The role of real activity versus accruals earning management in SEO valuation*. Working Paper

Kumar, GauravdanArun Kumar Misra. 2015. *Closer View at the Stock Market Liquidity:A Literature Review*. Asian Journal of Finance & Accounting Vol. 7 No 2

Kusumawati, E., Shinta Permata Sari, dan RinaTrisnawati. 2013. *Pengaruh Asimetri Informasi dan Mekanisme Corporate Governance Terhadap Praktik Earning Management (Kajian Perbandingan Perusahaan yang Terdaftar dalam Indeks Syariah dan Indeks Konvensional Bursa Efek Indonesia).* Proceeding Seminar Nasionaldan Call for Papers Sancall 2013

Leuz, C., Nanda, D., Wysocki, P., 2003. *Earning Management and investor protection: an international comparison*. Journal Finance Economic vol 69

Llukani, Teuta. 2013. *Earnings Management and Firm Size: An Empirical Analyze in Albanian Market*. European Scientific Journal vol. 9 no.16

Masoumi, Seyed Rasoul and Hanieh Khodadadi Tirkolaei. 2013. *On The Relation between Real Earnings Management and Cash Flow from Operation in Tehran stock exchange*. Journal of Technical Journal of Engineering and Applied Sciences.

M. Crae and H. Nilsson. 2001. *The explanatory and predictive power of different specifications of the Ohlson (1995) valuation models*. The European Accounting Review, vol. 10, no. 2, pp. 315-341, 2001.

Mohammed Ibrahim Idris. 2012. *The Impact of Ownership Structure and External Audit on Accruals and Real Activities Earnings Management in Jordan*. Thesis University of Gloucestershire

Omran, Mohammed and Pointon, John. 2004. *The Determinants of the Cost of Capital by Industry within an Emerging Economy: Evidence from Egypt*. Internationla Journal of Business vol. 9

Pastor, L. and Stambaugh, R.F. (2003). *Liquidity Risk and Expected Stock Returns*. Journal of Political Economy, VIII, 642-685.

Reilly, Frank K. and Keith C. Brown. 2011. *Analysis and Portfolio Management 10th edition.* USA: South-Western Cengage Learning

Rinnobel, Bella. 2015. *Pengaruh pengungkapan Corporate Social Responsibility (CSR), Ukuran Perusahaan, Financial Leverage dan Manajemen Laba Terhadap Cost of Equity Perusahaan*. Semarang: Fakultas Ekonomika dan Bisnis Universitas Diponegoro.

Roychowdhury, S.2006. *Earning Management Through Real Activities Manipulation*. Journal Accounting Economy vol. 42

Setijaningsih, Herlin 3012. *Teori Akuntansi Positif dan Konsekuensi Ekonomi*. Jurnal Akuntansi / Volume XVI, No. 03, September 2012: 427-438

Swastika, Dwi Lusi Tyasing. 2013. *Corporate Governance, Firm Size, and Earning Management: Evidence in Indonesia Stock Exchange.* IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 10, Issue 4 (May. - Jun. 2013), PP 77-82

Sweeney, Amy P. 1994. *Debt-covenant violations and managers' accounting responses*. Journal of Accounting and Economics vol.17 281-308

Trisnawati, R., Wiyadi, dan Noer Sasongko. 2012. *Pengukuran Manajemen Laba: Pendekatan Terintegrasi (Studi komparasi perusahaan manufaktur yang tergabung pada indeks JII dan LQ 45 Bursa Efek Indonesia periode 2004-2010).*

Trisnawati, Rina dan Suhestiningsih (2012). *Riil Earnings Management Practices: The Comparative Studies Between Shariah Index And Conventional Index In Indonesian Stock Exchange during 2004-2010 period***.** Paper presented on Malaysia-Indonesia International Conference in Economics, Management and Accounting (MIICEMA), October 18th - 20th, Palembang Indonesia

Tsang, Liu, and Edelstein. 2009. *Real Earnings Management and Dividend Payout Signal: A Study For U.S. Real Estate Investment Trust*. http://www.ssrn.com

Vita, Arianie dan Rahmawati. 2010. *Analisis Praktik Real Earning Management Melalui Manipulasi Aktivitas Riil dan Dampaknya Terhadap Dividend Payout Ratio*. Jurnal Akuntansi, Manajemen Bisnis dan Sektor Publik Vol. 7 no. 1

Watts, R. L. Dan J. L. Zimmerman, (1990). *Positive Accounting Theory: A Ten Year Perspective*, the Accounting Review.

Wiyadi, Rina Trisnawati dan Noer Sasongko. 2015. *Tinjauan Empiris Berbagai Model Manajemen Laba pada Perusahaan Go Publik di Indonesia.* The 2nd University Research Coloquium 2015.

Zang, A. Y. 2012. *Evidence on the Trade Off Between Real Activities Manipulation and Accrual Based Earning Management*. Journal Accounting Review vol. 87.

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