



The Effect of Corporate Social Responsibility Disclosure and Value Based Management on Cost of Equity Capital

Angela Dirman

Accounting Study Program, Faculty of Economics and Business, University of Mercu Buana
Jl. Raya Meruya Selatan Kembangan West Jakarta, E-mail: angela.dirman@mercubuana.ac.id

Abstract *The purpose of this study is to investigate the effect of corporate social responsibility disclosure and value based management on the cost of equity capital. This study uses manufacturing company consumer goods sector which is listed on Indonesia Stock Exchange (IDX) in 2016-2017. By purposive sampling technique, thus research obtained 30 research samples. The results of this study indicate a positive influence between corporate social responsibility disclosure and the cost of equity capital, and the absence of influence between value based management and the cost of equity capital.*

Keywords Corporate social responsibility disclosure, value based management, cost of equity capital

Received: 16 Jun 2019 © The Authors 2019

Revised: 12 Aug 2019 Published by Human Resource Management Academic Research Society (www.hrmars.com)

Accepted: 16 Aug 2019 This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Published Online: 20 Aug 2019

1. Introduction

Companies get capital to finance their operations in two ways, namely through debt and company equity (Keown *et al.*, 2005). Debt is obtained from creditors who provide loans to companies and get returns in the form of interest. Whereas equity is obtained from investors who invest their capital in the form of shares and get returns in the form of dividends or capital gains. For companies, the total amount to be paid for all capital obtained is called the Cost of Capital which is divided into two, namely Cost of Debt (Cost of Debt) and Cost of Equity (Cost of Equity Capital) (Dhany and Irawan, 2012). Cost of Equity is defined as the expectations of shareholders of the return on capital invested in the company (Sirait and Sylvia, 2012). Investors will require the desired rate of return if they invest their capital. In other words it can be said that the cost of equity capital is the rate of return desired by investors. The cost of equity capital is closely related to the risk of investing in company shares (Wahyuni and Utami, 2018).

According to Botosan (2006), the cost of equity is influenced by the level of disclosure and risk (BETA). Based on research conducted by Graham *et al* (2005) company executives believe that conveying information voluntarily can reduce the company's cost of equity capital (Sirait and Sylvia, 2012). Broader disclosure of CSR will increase investor awareness about the existence of the company and enlarge the investor base, and of course reduce COC (cost of capital) (Suharsono and Gusti, 2013). Disclosures about CSR activities in annual reports in Indonesia are mostly voluntary by companies. The company carries out this disclosure to increase transparency between managers and stakeholders using annual reports. According to Adeyemo, *et al.* (2013), companies implement corporate social responsibility programs because of competition. This means that business organizations are socially responsible in order to remain in a global.

Reporting on corporate social responsibility (CSR) began to become a trend in Indonesia in the 2000s. In addition to the issuance of Law No. 40 of 2007 concerning Limited Liability Companies that require companies to report social and environmental responsibility activities, public demand is increasing so that companies not only profit from their operations but also give something back to the community is one reason growing CSR reporting in Indonesia.

At present the concept of CSR is closely related to the company's sustainability. CSR does not provide financial reporting results in the short term. But CSR will have an impact, both directly and indirectly on the company's finances in the future. According to Odetayo *et al.* (2014), corporate organizations need to meet the demands and expectations of other stakeholders apart from owners of the company. The management of organizations needs to respond to the external environment demand in order to achieve sustainable business success. The implication is that that corporate organizations need support of society in order for them to grow and prosper.

Investors also want their investment and public trust in their company to have a good image in the eyes of the community. Thus, if the company carries out CSR programs in a sustainable manner, it is expected that the company will run well. Therefore, CSR programs are more appropriate if they are classified as investments and must be a business strategy of a company (Siregar, 2007).

Research on the factors that influence disclosure of social responsibility raises diverse results. Among them by the Financial Reporting of the American Institute of Certified Public Accountants (Jenkin Committee) as cited by Botosan (1997) which states that the importance of the importance of disclosure is a low cost for equity capital. Similarly, the results of the study concluded by Botosan (1997) support the existence of a negative relationship between the level of disclosure to the cost of corporate equity is less significant for companies that are the center of attention of a large number of financial analysts.

In Gusti's research (2013) which examined the effect of CSR disclosure on COC with institutional ownership as a moderating variable the results showed that there was an influence between CSR disclosure on COC. This shows that the broader CSR disclosure will reduce COC.

The measure of financial performance that is based on accounting profit (accounting profit) is considered no longer sufficient to evaluate the effectiveness and efficiency of the company. This is because financial ratio analysis in measuring financial performance still has weaknesses; one of the disadvantages of financial ratios is the difficulty in choosing the right ratio that can be used for the interests of stakeholders. The assessment of financial performance by using financial ratios is only oriented to profit oriented, but at this time the company is required not only to be profit oriented but also to be value oriented. So now, many companies use performance measures that emphasize value or Value-Based Management (VBM) (Hartanti and Monika, 2008).

Value-Based Management is an integrated framework for measuring performance and management tools. Value-Based Management provides dynamic assessment and high organizational performance results based on financial strength. The concept of value based management focuses on creating long-term value for the company. In the VBM concept, to survive in the long term, the entire corporate strategy must be based on improving the welfare of shareholders.

At first glance, it appears that maximizing shareholder welfare and corporate social responsibility are two very contradictory things; companies may not be able to serve shareholders and the public at the same time (Arnold and Davies, 1999). But shareholders also want their investment and public trust in their company has a good image in the eyes of the community. Thus, if the company carries out CSR programs in a sustainable manner, it is expected that the company will run well.

Based on the background described, this study intends to reanalyze the relationship or influence of corporate disclosure of Corporate Social Responsibility (CSR) and Value Based Management (VBM) on the company's Cost of Equity Capital (COEC). The researcher used a manufacturing company in the consumer goods industry sector listed on the Indonesia Stock Exchange (IDX) on its website www.idx.co.id in 2016-2017 as the object of research.

From the description of the background of the research above, the main problems that will be discussed in this study can be formulated, namely: 1) Is there an effect of Corporate Social Responsibility Disclosure on the Cost of Equity Capital? 2) Are there any effects of Value Based Management on Cost of Equity Capital?

2. Literature Review

2.1. Stakeholders Theory

A shift in orientation from shareholders to stakeholders in the business world has been referred to as the cause of the emergence of corporate social responsibility issues. Stakeholders are all parties, both internal and external, that have a relationship that is both influential and influenced, directly or indirectly by the company (Reny and Danies, 2012).

According to the stakeholder approach, the organization chooses to respond to many of the demands made by stakeholders (stakeholders), that is, each group within the outside environment of the organization is exposed to the actions and decisions of the organization. According to this approach, organizations will strive to meet the environmental demands of groups such as employees, suppliers, investors, and the community (Robbins and Coulter, 1999). If the pressure from stakeholders is very strong and influences the continuity and performance of the company, then the company must be able to develop targeted and integrated policies and programs on social and environmental policies. By expressing concern for the environment through financial reporting, the company in the long run can avoid enormous costs due to demands from the community. Expenditures for social care disclosed to the public help indirect control over the company's business by the community.

According to Clarkson (1995), stakeholders are divided into two groups namely primary and secondary. Primary stakeholders are groups of stakeholders who do not take part or participate in the operations of a company. Secondary stakeholders are groups of stakeholders that influence and are influenced by the company, but are not involved and are not so important for the survival of the company.

Stakeholder theory is a theory that states that a company is an entity that not only operates for its own sake, but must provide benefits to all its stakeholders, because the survival of a company is supported by stakeholders (Ghazali and Chariri, 2007). Shareholders, creditors, consumers, suppliers, governments, communities, analysts, and other parties are stakeholder groups that are considered by companies to disclose or not information that is in the company's financial statements. All stakeholders have the right to obtain information about company activities.

2.2. Cost of Equity Capital

The cost of equity capital is the rate of return on the stock required by investors, namely the minimum rate of return desired by the fund provider (investor) to be willing to invest in the company (Utami, 2005). The task of financial managers is to know when and how much capital costs must be spent to finance the company's investment (Arief, 2009). The concept of the Cost of Equity Capital is closely related to the level of profit required. If the company produces a higher rate of return than Cost of Equity Capital, the rest of the return will cause an increase in the value of the company's ordinary shares, and further increase in shareholder wealth. Conversely, if the internal rate of return is smaller than the Cost of Equity Capital, then the shareholders' wealth will decrease. (Keown *et al.*, 2000).

Cost of Equity Capital is given as a risk compensation that investors are willing to take to invest in corporate capital. Based on the investor's perspective, there are expected returns that can be obtained through dividends or an increase in the value of the investment given. The expected return or cost of equity capital is related to the financial risks contained in the funds they invest in the company's business activities (Tanjung, 2014).

2.3. Corporate social responsibility

A shift in orientation from shareholders to stakeholders in the business world has been referred to as the cause of the emergence of corporate social responsibility issues. Stakeholders are all parties, both internal and external, that have a relationship that is both influential and influenced, directly or indirectly by the company (Reny and Danies, 2012). Gray *et al.* stated that the stakeholder theory assumes that the existence of a company requires the support of stakeholders. The stronger stakeholders, the company must increasingly adapt to stakeholders. Social disclosure is then seen as a dialogue between companies and

stakeholders. If the pressure from stakeholders is very strong and influences the continuity and performance of the company, the company must be able to develop. By expressing concern for the environment through financial reporting, the company in the long run can avoid enormous costs due to demands from the community. Expenditures for social care disclosed to the public help indirect control over the company's business by the community.

Corporate social responsibility is a claim on initiatives that show that business does not only operate for the benefit of shareholders, but also for the benefit of stakeholders in business practices, namely workers, local communities, governments, NGOs, consumers, and the environment. Corporate Social Responsibility as a new accounting concept is a transparency of social disclosure of activities or social activities carried out by companies, where the transparency of information disclosed is not only the company's financial information, but the company is also expected to disclose information about social and environmental impacts caused by company activities.

2.4. Value Based Management

The concept of Value Based Management (VBM) encourages management to be more motivated and focus on creating future cash flows for shareholders. VBM that is applied continuously, in an efficient market condition will reflect performance and good prospects on stock prices. Value-Based Management provides dynamic assessment and high organizational performance results based on financial strength, such as Economic Value Added (EVA) that can show an organization is successful or failed. The economic value of a commercial company is only financially legitimate achieved. A good company must ensure that customers are satisfied, employees are well cared for, but the bottom line is always profit. VBM has two key elements. First, value creation for shareholders (shareholder value) as the company's main goal. Second, as a measure of the company's internal performance that is able to motivate management to pursue the goal of maximization.

The concept of Economic Value Added (EVA) was first developed by Stern, Steward & Co (Brigham and Houston (2010). EVA is one way to assess financial performance. EVA is an indicator of the addition of value from an inventory. The EVA method is a new approach to assessing company performance fairly that takes full account of funders in terms of interests, expectations and degree of justice, measured using weighted measures and existing capital structures (Wiyono and Kusuma, 2017).

Rudianto (2013) argues that Economic Value Added (EVA) is a financial management system to measure economic profit in a company, which states that welfare can only be created if the company is able to meet operating costs (operating costs) and capital costs (cost of capital). EVA shows the remaining profit after deducting capital costs. A positive EVA value indicates that the company earns a profit because the rate of return exceeds the cost of capital. If the company decides not to hold its profits in the form of retained earnings, the company will share its profits as dividends to shareholders. The higher the profits obtained by the company, the higher the dividends obtained by shareholders. The higher the dividend, the better the company's value because many investors are interested in investing in the company.

2.5. Previous Research

El Ghoul *et al.* (2011) examine how the performance of corporate social responsibility can affect the company's cost of capital. The results of the study show that companies that have good corporate social responsibility will have low cost of capital. Equivalent to the research results of Riyanto and Gusti (2013) which examined corporate social responsibility cost of capital, and institutional ownership as moderating variables, indicating that the broader disclosure of corporate social responsibility would reduce the company's cost of capital.

Research by Suharsono and Rahmasari (2013) where the results of his research are that CSR has an effect on COC, the broader CSR disclosure will reduce COC. Herald (2013) conducted a study on the Effect of Corporate Social Responsibility (CSR) on the Cost of Equity. The results of this study are Corporate Social Responsibility has a significant negative effect on the Cost of Equity Capital Company. Nugroho (2012) conducted a study on the effect of Corporate Social Disclosure on Cost of Equity Capital. The result of this research is the Corporate Social Responsibility Disclosure does not affect the Cost of Equity Capital.

Mitta ariyani and yeterina widi nugrahanti's research (2013) used the effect of Corporate Social Responsibility disclosure as an independent variable and Cost of Equity as the dependent variable. The results of this study are disclosure of Corporate Social Responsibility in the annual report negatively influencing the company's Cost of Equity.

2.6. Effects of Corporate Social Responsibility Disclosure on Cost of Equity Capital

The concept of the cost of equity according to Sukarti and Suwarni (2018) is a fee paid in attracting investors to invest their money in company shares and retain these investors. The cost of equity is related to the risk of the company's stock investment. If the company's risk is low, investors will be interested in investing their capital. So that the cost of equity is important for investors in considering investment decisions against the company. Disclosure of Corporate Social Responsibility (CSR) through financial statements can provide more information to investors to companies and investors interested in investing their capital, thereby reducing the company's cost of equity.

A lot of literature confirms that CSR activities contained in corporate social disclosures can reduce the cost of corporate capital. As with previous studies conducted by El Ghouli, et al. (2011) found that companies that have good CSR will have a low cost of equity capital. Research conducted by Riyanto and Gusti (2013) by using variables of corporate social responsibility, cost of capital, and institutional ownership as moderating variables shows that the broader disclosure of corporate social responsibility will reduce the cost of capital. Thus it raises an interesting suspicion that CSR disclosure has a significant negative effect on the cost of capital.

H1: Corporate Social Responsibility Disclosure has a negative effect on the Cost of Equity Capital

2.7. Effect of Value Based Management on Cost of Equity Capital

Many companies use performance measures that emphasize value or value-based management (VBM) (Hartanti and Monika, 2008). Value-Based Management provides dynamic assessment and high organizational performance results based on financial strength. The concept of value based management focuses on creating long-term value for the company. In the VBM concept, to survive in the long term, the entire corporate strategy must be based on improving the welfare of shareholders.

At first glance, it appears that maximizing shareholder welfare and corporate social responsibility are two very contradictory things; companies may not be able to serve shareholders and the public at the same time (Arnold and Davies, 1999). But shareholders also want their investments and public trust in their company has a good image in the eyes of the community, so the company is expected to run well. Thus it raises an interesting suspicion that the disclosure of VBM has a significant effect on the cost of equity capital.

H2: Value Based Management has a negative effect on Cost of Equity Capital

2.8. Framework

Based on the theoretical foundation and previous studies, the researchers developed a research framework that was tested as shown in the following figure 1.

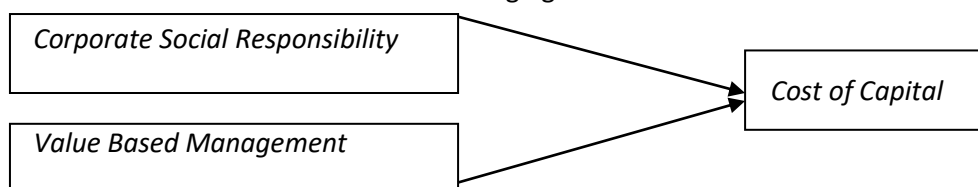


Figure 1. Framework for Thinking

3. Methodology of Research

3.1. Types of Research

In this study the type of research used is causal research namely explaining the effect of an independent variable on the dependent variable. The independent variables in this study include the mechanism of disclosure of corporate social responsibility and value based management while the dependent variable is the cost of equity capital.

3.2. Operational Definition of Variables

According to Sekaran and Bougie (2013), variables are anything that can take different things or vary values. Values can be different at the same time the object or person is at the same time for different objects or people.

1) Dependent variable

Dependent variables, namely variables that are influenced or become a result due to the existence of independent variables. The dependent variable in this study is that used in this study is Cost of Equity Capital. The cost of equity capital is calculated based on the discount rate that investors use to assess future cash flow (Ohlson, 1995; Botosan, 1997; Botosan and Plumlee, 2002; Utami, 2005).

$$P_t = \sum_{r=1}^{\infty} \frac{E_t \{x_{t+1} - rB_{t+1}\}}{(1+r)^r} \quad (1)$$

Where:

P_t = Stock price in period t

B_t = Book value per share period t

x_{t+1} = profit per share

r = expectation of cost of equity capital

To estimate earnings per share in period $t + 1$, the Random Walk model is used as follows:

$$E(X_{t+1}) = X_t + \delta \quad (2)$$

Where:

$E(X_{t+1})$ = Estimated earnings per share in period $t + 1$

X_t = actual profit per share in period t

δ = Term Drift used by the average change in earnings per sheet stock for 5 years

For the purpose of estimating earnings for the next year ($t + 1$), the average change in earnings per share for five years or since going public is used, if the issuer has not been even five years into a public company. Thus the estimated cost of equity capital in equation (1) can be simplified as follows:

$$P_t = B_t + (1+r)^{-1} [E(X_{t+1}) - rB_t] \quad (3)$$

X_{t+1} = earnings per share period $t + 1$ estimated by the random walk model as in equation (2).

After mathematically simplified equation (4) becomes:

$$(P_t - B_t)(1+r) = E(X_{t+1}) - rB_t$$

$$r = (E(X_{t+1}) - (P_t - B_t)(1+r)) / B_t$$

Where:

P_t = Stock price in period t

B_t = Book value per share period t

$E(X_{t+1})$ = Estimated Earnings per share in period $t + 1$

r = Equity capital costs

2) Independent Variables

According to Sekaran (2013), the independent variable is a variable that affects the dependent variable, either positively or negatively. The independent variable to be tested in this study is the extent of disclosure of corporate social responsibility symbolized by (X1), good corporate governance symbolized by (X2), size symbolized by (X3), leverage symbolized by (X4), and ROA symbolized by (X5).

1. Disclosure of corporate social responsibility In this study, the independent variable, CSR will be measured using Corporate Social Disclosure Index (CSDI). Information about the Corporate Social Disclosure Index (CSDI) to be used in this study is based on the G4 (Global Reporting Initiative) G4 obtained from the website www.globalreporting.org.

CSDI index calculations are carried out using a dichotomy approach, namely that each CSR item in the research instrument disclosed by the company is given a value of 1 and 0 if not disclosed (Vinta *et al.*, 2016). Furthermore, the score for all items is added to obtain the overall score for each company. The CSDI calculation formulas are as follows (Vinta *et al.*, 2016):

$$CSDI_j = \frac{\sum X_{ij}}{n_j} \quad (4)$$

Where:

CSDI: Corporate Disclosure Index j

n_j: number of items for company j, n = 91

X_{ij}: 1 = if item i is disclosed; 0 = if item i is not disclosed

2. Value Based Management

Economic Value Added (EVA) is a corporate goal to increase the value of capital that investors and shareholders have invested in business operations. According to S. David Young and Stephen O'Byrne (2001) EVA calculations are carried out using the following formula:

$$EVA = NOPAT - (WACC) (Invested Capital) \quad (5)$$

Or

$$EVA = NOPAT - Capital Charges \quad (6)$$

Where:

EVA = Economic added value

NOPAT = Net profit after tax

WACC = Weighted average capital costs

Invested Capital = Capital invested

To obtain each of these variables, the following calculations are needed:

a. Calculating NOPAT (Net Operating After Tax)

NOPAT is the sum of operating profit, interest income, tax income, profit or loss on sale of fixed assets or stock investments, other profits or losses related to company operations.

Following is the NOPAT formula:

$$NOPAT = Operating Income \text{ or } EBIT \times (1 - \text{tax}) \quad (7)$$

b. Calculating the Weighted Average Cost of Capital (WACC)

The WACC is the weighted average cost of debt and own capital, describing the minimum rate of return to get the required rate of return by the investor. This WACC is weighted based on the proportion of each financing instrument in the company's capital structure (debt and equity). The WACC formula according to Brigham Houston (2010):

$$WACC = w_d k_d (1 - T) + w_p k_p + w_c k_s \quad (8)$$

Where:

WACC = Weighted average capital costs

k_d (1-T) = Component of post-tax debt costs

k_p = Cost of preferred stock components

k_s = Cost of ordinary equity components

The following are the variables needed to calculate the WACC:

1) Calculating the Cost of Debt (K_d)

Cost of Debt is the costs incurred by the company regarding the debt it has. Cost of Debt is used to determine some of the costs that must be borne by the company because it uses capital originating from the loan. In the calculation used after tax cost of debt.

$$K_b = \frac{\text{Interest expense}}{\text{Long-term liability}} \quad (9)$$

$$K_d = K_b \times (1 - \text{tax})$$

Where:

K_d = Cost of debt capital after tax

K_b = Cost of capital before tax debt

tax = tax rate

2) Calculating the Cost of Preferred Shares (k_p)

The preferred cost component (cost of preferred stock) used to calculate the weighted average cost of capital (k_p) is:

$$k_p = \frac{D_p}{P_p} \quad (10)$$

3) Calculating Retained Earnings Balance (k_s) and Common Stock (k_e)

Cost of Equity is to determine the amount of the cost of own capital due to the use of the source of own capital which consists of retained earnings and the issuance of new shares. Cost of Equity is reflected in the rate of return expected by investors for investment in shares of a company.

Capital Asset Pricing Model (CAPM)

This approach is used to analyze the relationship between the ratio and the level of excavation. This model is based on equilibrium conditions the level of profit required by a stock will be affected by the risk of the stock. The CAPM implies the rate of return requested for ordinary shares. The formula for calculating the cost of share capital with the CAPM approach according to Husnan (2000) is as follows:

$$K_e = K_{rf} + \beta (K_{rm} - K_{rf}) \quad (11)$$

Where:

K_e = Minimum yield level of shareholders

K_{rf} = Risk free interest rate

β = Size of systematic risk from shares

K_{rm} = Estimated minimum yield rate in the market as a whole.

To calculate using this model, the required variables are as follows:

1) Risk Free Returns (K_{rf})

Taken from an investment with a risk free interest rate or a definite rate of return obtained without any risk which is usually represented by the interest rate of government bonds or SBI.

2) Calculation of Market Returns

This calculation is based on the composite stock price index (CSPI) on the Indonesia Stock Exchange with the formula:

$$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} \quad (12)$$

Where:

R_{mt} = level of return on market portfolio period t

$IHSG_t$ = Period t joint stock price index

$IHSG_{t-1}$ = Joint stock price index before period t

3) Rate of Return on Individual Shares

To calculate the return on individual stocks, data is obtained from the development of individual shares. The following is the formula for calculating individual stock returns:

$$R_{it} = \frac{P_{it} - P_{i(t-1)} + D_{it}}{P_{i(t-1)}} \quad (13)$$

Where:

R_{it} = The rate of return on stock i in period t

P_{it} = Stock price i in period t

$P_{i(t-1)}$ = Share price period i before period t

D_{it} = Dividend i in period t

4) Beta Risk Measurement

Beta is a regression coefficient between two variables, namely the excess level of portfolio profits and the excess profit share. Beta measurements can be done using a regression approach, namely:

$$\beta = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - (\sum x)^2} \quad (14)$$

Where:

β = Beta coefficient

n = Number of graduation periods

x = Return rate of market portfolio (R_{mt})

y = Rate of return on individual shares (R_{it})

c. Invested Capital (IC) Invested Capital is the result of the translation of estimates in the balance sheet to see the amount of capital invested in the company by creditors and shareholders and how much capital is invested in other operational activities.

$$IC = (\text{Total Liabilities} + \text{Total Equity of Shareholders}) - \text{Current Debt} \quad (15)$$

EVA values generated from EVA calculations are very helpful in assessing company performance and helping in considering management decisions.

To find out whether there is added value or not, it can be expressed with the following explanation:

If $EVA > 0$ (positif), means that there is a process of economic value added in the company, the financial performance of the company is good.

If $EVA = 0$, means economically “break even” because all profits are used to pay obligations to funders both creditors and shareholders.

If $EVA < 0$ (negatif), means that the total cost of capital of the company is greater than the operating profit after tax obtained, so that the financial performance is not good.

With this assessment, the EVA condition reflects a compensation level higher than the cost of capital. The more positive the EVA, the better the company's performance and the more negative the EVA, and then there is a decrease in the value of the company's wealth.

3.3. Population and Research Samples

The population in this study is a consumer goods manufacturing sector manufacturing company listed on the Indonesia Stock Exchange (IDX) on its website www.idx.co.id in 2016-2017. Samples were selected by purposive sampling method and cross section. Results of 15 companies were obtained as samples, with a total sample of 30 samples within 2 years (2016-2017), with sample criteria as follows:

1. All manufacturing companies in the consumer goods industry sector are listed on the Indonesia Stock Exchange (IDX) in 2016-2017.
2. Having positive EVA during the 2016-2017 observation period.
3. Have a positive profit during the 2016-2017 observation period.

3.4. Analysis Methods

The data analysis method used in this study is quantitative analysis. Data analysis is needed to test the hypothesis, so that it can be seen the effect of disclosure of corporate social responsibility and value based management with Cost of Capital. The analytical methods needed include:

1. Descriptive Statistics Analysis

Descriptive statistics provide a description or description of a data that is seen from the average value (mean), standard deviation, variance, maximum, minimum and number of samples of each research variable.

2. Test of Classical Assumptions

This analysis can also be referred to as a prerequisite test of the multiple linear regression model that will be tested. A good regression model must produce a linear estimator not the best bias (Best Linear Unbias Estimator/BLUE). This condition will occur if it is fulfilled by several assumptions called classic assumptions such as normality test, multicollinearity test, heteroscedasticity test, autocorrelation test.

The regression model in this study is stated as follows:

$$COEC = \alpha + \beta_1 CSDI + \beta_2 EVA + e \quad (16)$$

Where:

COEC= *Cost of Equity Capital*

α = constants

β_1 - β_2 = Regression coefficient

CSDI= *Corporate Social Responsibility Disclosure Index*

EVA= *Economic Value Added*

e = error term

4. Results and discussions

4.1. Description of research data

The following are presented the results of descriptive statistics about the research variables as follows:

Table 1. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|----------|-----------|----------------|
| COEC | 30 | -1.2152 | 178.4224 | 10.795736 | 41.7863471 |
| CSR | 30 | .4396 | .8571 | .520147 | .0786804 |
| LN_EVA | 30 | 23.2109 | 28.6368 | 26.217400 | 1.2313576 |
| Valid N (listwise) | 30 | | | | |

Below this is the translation of research variables from descriptive statistical results:

1. The cost of equity capital is calculated based on the discount rate that investors use to assess future cash flow. The table above shows that the mean is 10,795736 times the discount rate. The minimum value of -1,2152 is owned by PT.Akasha Wira International Tbk in 2017. The maximum value of 178,4224 is owned by Merck Sharp Dohme Pharma Tbk in 2017.

2. Disclosure of corporate social responsibility is measured using the Corporate Social Disclosure Index (CSDI). The CSDI index calculation is carried out using the dichotomy approach, namely that each CSR item in the research instrument disclosed by the company is given a value of 1 and 0 if not disclosed. The table above shows that the mean (mean) is 0.520147, which means that the level of disclosure of corporate social responsibility of the consumer goods manufacturing industry is quite high at 52.0147%. The minimum value of 43.96% is owned by PT. Chitose International Tbk in 2016. The maximum value of 85.71% is owned by Merck Sharp Dohme Pharma Tbk.

3. Economic Value Added (EVA) is a corporate goal to increase the value of capital that investors and shareholders have invested in business operations. The mean of Rp.480,360,326,325, which means that the manufacturing companies in the industrial sector of value-added consumption capital goods that investors have invested tend to be large. The minimum value of Rp. 12,032,473,565 which is owned by PT. Kedaung Indah Can Tbk in 2016, the maximum value of Rp2,733,930,373,766 is owned by Mayora Indah, Tbk in 2016.

Classic assumption test Normality test

Normality testing using the Lilliefors test. The provision in the error test is if the statistic L count < L table ($\alpha = 0.05$), then the error data is normally distributed. But if L count > L table ($\alpha = 0.05$), then the data is not normally distributed.

Thus the overall results of the calculation of the normality test using the Lilliefors test can be seen in the summary in table 2.

Table 2. One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 30 |
| Normal Parameters ^{a,b} | Mean | 0E-7 |
| | Std. Deviation | 28.31820206 |
| | Absolute | .210 |
| Most Extreme Differences | Positive | .210 |
| | Negative | -.119 |
| Kolmogorov-Smirnov Z | | 1.148 |
| Asymp. Sig. (2-tailed) | | .144 |

a. Test distribution is Normal.

b. Calculated from data.

Based on table above, it can be seen that the Kolmogorov-Smirnov Z value is 1.1148 and the significance probability is 0.144 > α 0.05, which means that the residual data is normally distributed.

Multicollinearity Test

Table 3. Coefficients^a

| Model | Collinearity Statistics | |
|--------------|-------------------------|-------|
| | Tolerance | VIF |
| 1 (Constant) | | |
| CSR | ,975 | 1,025 |
| LN_EVA | ,975 | 1,025 |

a. Dependent Variable: COEC

The results of the above calculation indicate that tolerance values indicate that there is no independent variable which has a tolerance value of less than 0.10, which means there is no correlation between independent variables whose value is more than 95%. The results of the calculation of the Variance Inflation Factor (VIF) value also show the same thing there is no one independent variable that has

a VIF value of more than 10 (Ghozali, 2016). So, it can be concluded that there is no multicollinearity between independent variables in the regression model.

Autocorrelation Test

The autocorrelation test was used to determine whether there was a correlation between intruder errors in a certain period and the previous period's disturbing errors. A good regression model is a regression that is free from autocorrelation.

Table 4. Runs Test

| | Unstandardized Residual |
|-------------------------|-------------------------|
| Test Value ^a | .72555 |
| Cases < Test Value | 15 |
| Cases >= Test Value | 15 |
| Total Cases | 30 |
| Number of Runs | 17 |
| Z | .186 |
| Asymp. Sig. (2-tailed) | .853 |

a. Median

Based on the SPSS output, it can be seen that the runs test produces a significance value of $t > 0.05$, so it is concluded that there is no autocorrelation in the regression model, thus the assumption that no autocorrelation has been fulfilled.

Heteroscedasticity Test

Table 5. Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | 20,323 | 37,554 | | ,541 | ,598 |
| 1 Lnx1 | 2,684 | 2,480 | ,286 | 1,082 | ,299 |
| Lnx2 | -5,021 | 11,507 | -,115 | -,436 | ,670 |

a. Dependent Variable: Lnei2

Based on Table, it can be seen that the park test produces a significance value of $t > 0.05$, so it is concluded that heteroscedasticity does not occur in the regression model, thus assuming no heteroscedasticity has been fulfilled.

Hypothesis testing

Table 6. Determination Coefficient Test (R^2)

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | ,735 ^a | ,541 | ,507 | 29,3482894 | 1,803 |

a. Predictors: (Constant), LN_EVA, CSR

b. Dependent Variable: COEC

In table shows that the coefficient of determination shows the R-square value of 0.541. This means that 54.10% of the cost of equity capital can be explained significantly by disclosure of corporate social responsibility, and value based management. Whereas $(100\% - 54.10\%) = 45.90\%$ the cost of equity capital can be explained by other variables.

Simultaneous Significance Test (Test Statistic F)

Table 7. ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|----|-------------|--------|-------------------|
| 1 Regression | 27381.169 | 2 | 13690.584 | 15.895 | .000 ^b |
| Residual | 23255.696 | 27 | 861.322 | | |
| Total | 50636.865 | 29 | | | |

a. Dependent Variable: COEC

b. Predictors: (Constant), LN_EVA, CSR

Based on table, it can be concluded that the disclosure variables of corporate social responsibility, and value based management jointly influence the cost of equity capital, which means that a feasible model is used for research that is seen with a sig value of 0.000 < 0.05.

T test

Table 8. Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -275.952 | 128.511 | | -2.147 | .041 |
| CSR | 395.219 | 70.140 | .744 | 5.635 | .000 |
| LN_EVA | 3.096 | 4.482 | .091 | .691 | .496 |

a. Dependent Variable: COEC

Based on Table, Test Results Statistics t each independent variable on the dependent variable can be explained as follows:

1. Disclosure variable corporate social responsibility has a t-count value of 5.6365 and a sig value of 0.000 < 0.05. This shows that the CSR variable has a positive and significant effect. In making a hypothesis, H1 is rejected, which means that disclosure of corporate social responsibility has a positive and significant effect on the cost of equity capital.

2. EVA variable has t value of 0.691 and sig value of 0.496 > 0.05. This shows that the EVA variable does not affect the cost of equity capital. In making a hypothesis, H2 is rejected, which means that value based management does not affect the cost of equity capital.

4.2. Discussions

Based on the results of multiple linear regression testing previously described, the discussion in this study concerning

1. Effect of Disclosure of Corporate Social Responsibility Information on Cost of Equity Capital the results of this study found that disclosure variables of corporate social responsibility affect the cost of equity capital. The regression coefficient value for the CSR variable is positive, so that it can be said that the effect of disclosure of corporate social responsibility on the cost of equity capital is the more widespread disclosure of CSR, it will increase COE. These results are not consistent with the research conducted by Suharsono and Gusti ayu (2013) and Mitta Ariyani and Yeterina (2013) where the results of the study state that CSR has a negative effect on COE. High disclosure of CSR affects the rise of the company's COE. Evidence from research results is shown by the average disclosure of CSR in the companies studied at 52.01%, which means that the majority of companies that are sampled have carried out disclosure of corporate social responsibility. The cost of equity capital is a picture of the expected rate of return from investments that have been made by the company and is the main input in making long-term investment decisions of the company. Disclosure of corporate social responsibility with the cost of equity capital will help managers understand the impact of implementing CSR on corporate financing. The cost of equity capital can be a channel in the financial market that encourages companies to become more socially responsible.

2. Effect of Value Based Management on Cost of Equity Capital The results of this study found that the value based management variable that is proxied by the economic value added does not affect the cost of equity capital. This shows that currently the management of the company is not only focused on the creation of future cash flows for shareholders but there are also other factors that are the main focus of management.

5. Conclusions

Based on the results of the analysis and discussion that has been carried out, then conclusions can be given as follows: 1. Disclosure of corporate social responsibility has a positive and significant effect on the cost of equity capital. 2. Value Based Management does not affect the cost of equity capital

6. Suggestions

As previously explained, this study contains limitations. But the results of this study can at least motivate the next study. Taking into account existing limitations, it is expected that future research will improve the following factors: 1. With the disclosure of future information, it is hoped that issuers in Indonesia will become more active in updating information on websites with more advanced technology so that users can better know the information needed. 2. Using another calculation index or using another taxonomy 3. Using other issuers sector to be more comprehensive.

References

1. Adeyemo S.A, Oyebamiji F.F, Alimi, K.O. (2013). International Journal of Academic Research in Economics and Management Sciences. November 2013, Vol. 2, No. 6. ISSN: 2226-3624.
2. Botosan, C.A. (1997). Disclosure Level and the Cost of Equity Capital. *The Accounting Review*, 22 (3), 323-349
3. Brigham, E. F., Houston, J. F. (2010) *Dasar-dasar Manajemen Keuangan*. (Buku Edisi 11). Jakarta. Salemba Empat.
4. El Ghouli, S., Guedhami, Omrane, C.Y., Chuk, R., Mishra, D. (2011). Does Corporate Social Responsibility Affect The Cost of Capital? *Journal of Banking and Finance* 35, 2388-2406.
5. Graham, J. R., C. R. Harvey, & S. Rajgopal. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40, 3–73.
6. Hartanti, D.; Rumiris M. E. (2008). Analisis Hubungan Value Based Management dengan Corporate Social Responsibility dalam Iklim Bisnis Indonesia (Studi Kasus Perusahaan Swa100 2006)". *Symposium Nasional Akuntansi XI, Pontianak, 22 – 25 Juli 2008*.
7. Keown, A. J. Scott, D. F., Martin, J. D., Petty, J. W. (2000). *Dasar-dasar Manajemen Keuangan*. Edisi 2. Jakarta: Salemba Empat. 443-480.
8. Mitta A., Nugrahanti, Y.W. (2013). Pengaruh Pengungkapan Corporate Social Responsibility terhadap Cost of Equity Perusahaan. *Telaah Bisnis Vol.14, No.1* ISSN: 1411-6375 (cetak), ISSN: 2541-6790 (online).
9. Odetayo, T. A., Adeyemi, A. Z, Sajuyigbe, A.S. (2014). *International Journal of Academic Research in Business and Social Sciences*. August 2014, Vol. 4, No. 8. ISSN: 2222-6990.
10. Rudianto. (2013). *Akuntansi Manajemen*. Jakarta: Erlangga.
11. Sekaran, U. (2003). *Research Method for Business A Skill Building Approach*, 4th Ed. New York: John Wiley and Sons.
12. Sirait, Shanty D.Y., Sylvia, V.S. (2012). Hubungan antara Biaya Modal Ekuitas dengan Tingkat Pengungkapan Tanggung Jawab Sosial dan Modal Intellectual pada Sektor Perbankan di Indonesia. *Jurnal Akuntansi dan Auditing Volume 9, No. 1*, 1-96.
13. Suharsono, R. S.; Ayu. G. (2013). Pengaruh pengungkapan Corporate Social Responsibility Terhadap Cost of Capital dengan kepemilikan Institusional Sebagai variabel Pemoderasi. *Jurnal Ilmiah Akuntansi*, Vol 2, No.2, Juni 2013. ISSN 2089-3310.
14. Sukarti, Titiek. S. (2018). Pengaruh Pengungkapan CSR, Asimetri Informasi, Ukuran Perusahaan, dan Kepemilikan Institusional terhadap Cost of Equity. *Prosiding SENDI_U*.

15. Tanjung, F.A. (2014). Mengkaji Kelayakan Bisnis Menggunakan Cost of Capital. <http://www.bglconline.com/>
16. Utami, W. (2005). Pengaruh Manajemen Laba Terhadap Biaya Modal Ekuitas (Studi Pada Perusahaan Publik Sektor Manufaktur). *Jurnal Riset Akuntansi Indonesia*. Vol. 9, no. 2, Mei 2006.
17. Vinta, P. (2016). Pengaruh Pengungkapan *Corporate Social Responsibility* (CSR) Terhadap *Earnings Response Coefficient* (ERC). *Jurnal Akuntansi dan Keuangan*, Vol. 18, No. 1, Mei 2016, 15-26.
18. Wahyuni, P.D., Utami, W. (2018). Pengaruh Good Corporate Governance dan Intellectual Capital Disclosure terhadap Cost of Equity Capital. *Profita: Komunikasi Ilmiah Akuntansi dan Perpajakan*. Vol.11 No.3. Desember 2018
19. Wiyono, G., Kusuma, H. (2017) *Manajemen Keuangan Lanjutan: Berbasis Value Creation*. Yogyakarta: UPP STIM YKPN.