



## The Effect of Disclosure and Earnings Quality on the Cost of Equity in Indonesia

Yossy Octa Dewanti; Sutrisno T; Aulia Fuad Rahman

Faculty of Economics and Business, Universitas Brawijaya, Indonesia

<http://dx.doi.org/10.18415/ijmmu.v6i2.584>

### **Abstract**

This study aims to examine the effect of disclosure and earnings quality on the cost of equity. The theory used to explain the relationship of each variable in this study is agency theory and signal theory. The population used in this study is a manufacturing company listed on the Indonesia Stock Exchange for the period 2013-2017. The sample selection method used is the *purposive sampling method* and produced 87 companies as samples. Data analysis in this study used E-Views (*Econometric Views*). The results of this study succeeded in proving that the higher the disclosure and earnings quality can reduce the cost of equity.

**Keywords:** Disclosure; Earnings Quality; The Cost of Equity

### **Introduction**

The Cost of Equity are based on the rate of return requested by investors from the company's common stock (Brigham and Houston, 2011: 12). The cost of equity can increase internally by holding earnings or externally by selling or issuing new ordinary shares. Companies that use retained earnings for investments need to get a return on retained earnings of at least the amount that can be received by shareholders on alternative investments with equal risk. The greater the risk, the greater the demand for investor compensation for its investment (Bodie, 2008: 219). So it can be concluded if the cost of low corporate equity shows the low level of risk of the company, so the risk of the expected rate of return by investors will be low. This is in accordance with the principle of *high risk high return* and *low risk low return* which is generally known by investors in making investments. According to Ifonie (2012) the cost of equity is the magnitude of investor *rate* used to discount the expected dividends received in the future. Whereas for companies, the cost of equity is the amount of costs that must be incurred by the company to obtain funds from investors.

Empirical evidence of the cost of equity in Indonesia can be concluded that the average per year has increased, except in 2015 which has decreased. However, in 2017 the cost of manufacturing companies' equity increased compared to previous years. The cost of equity must be minimized, so as not to disrupt the performance of the company because there are fewer investment opportunities that can be taken. Several things can be done by the company to minimize the cost of equity, including increasing financial statement disclosure and earnings quality in the financial statements. In accordance with the agency theory that agency conflict arises from the separation of roles between owners and managers (

Jensen and Meckling, 1976) , financial statements are considered very important for proving the company's performance made by managers and used by owners to assess a company. Financial statements are also a form of a signal or signal (theory of signals) of managers towards their owners or investors about how management views the company's prospects. Therefore, the disclosure and quality of earnings in the report is one of the highlights of its owners or investors.

Company that reveal more information associated with a lower cost of capital (Francis, *et al.*, 2008). Meanwhile, financial statements that do not provide adequate disclosure by some investors are seen as risky financial reports. If investors assess a high-risk company based on the financial statements produced, then the value of *return (return)* what investors expect is also high, which in turn will cause a high cost of equity that must be spent by the company (Clarkson *et al.* 1996).

Empirical evidence of the relationship between disclosure and the cost of equity proves that higher disclosure can reduce the cost of equity (Juniarti and Yunita, 2003; Poshakwale and Courtis, 2005; Cheng , *et al.* , 2006; Francis, *et al.* , 2008; Petrova, *et al.* , 2012; Fu, *et al.* , 2012; Sari, 2017). This is different from the empirical evidence found by Botosan and Plumlee (2002), Indayani and Mutia (2013) who found that higher disclosure, also higher the cost of equity. In addition, the results of research on the relationship between disclosure and the cost of equity were carried out by Wulandari and Atmini (2012), Heriyanthi (2013), Nurjanati and Rodoni (2015), Barvidi (2015), Nasih, Komalasari, and Madyan (2016), Dewi and Chandra (2016), Lahaya, (2017) found that there was no influence between the two variables. This shows that there are still differences in the results of research on the relationship between disclosures and equity costs. The differences in the results of this study encourage researchers to reexamine the relationship of disclosures with the cost of equity.

In addition to disclosure factors, earnings quality in these financial statements can also affect the cost of equity. Quality of earnings is very important, because earnings is one of the main sources of financial disclosure for investors and managers regard earnings as an important summary indicator of company performance (Graham *et al.*, 2005). Earnings also functions as a key input for company valuation (Francis *et al.*, 2003). Bhattacharya *et al.*, (2012) found a direct relationship between the quality of earnings and the cost of equity through path analysis.

Previous research has tried to explain the effect of earnings quality on the cost of equity. However, the results obtained from several previous studies are still not consistent. On the one hand, several studies show that earnings quality is negatively related to the cost of equity, that high accrual quality and more relevant income make it possible to reduce the cost of equity issued by companies (Fatma and Abdelwahed, 2010; Persakis, 2015; Eliwa *et al.*, 2016; Pramita, 2016; and Lahaya 2017). Other studies have found a positive relationship between earnings quality and the cost of equity. Companies that have low earnings quality will be able to reduce their cost of equity (Gotti & Mastroliia, 2014). In addition, research conducted by Cohen (2003), Francis (2008), and Nasih, Komalasari, and Madyan (2016) found evidence that there was no significant relationship between earnings quality and the cost of equity.

Based on previous empirical research on the effect of disclosures and earnings quality on the cost of equity which shows mixed results. This shows that *research gaps* still occur in research on disclosures and earnings quality against the cost of equity. Differences that occur in the results of previous studies can be caused by different samples, measurements of different variables, and the presence of other variables (independent variables or controls) that affect the relationship between disclosure and earnings quality on the cost of equity.

## **Development Hypothesis**

### *The Effect of Disclosure on the Cost of Equity*

Disclosures help investors and creditors to understand economic investment risk with inaccuracies and incomplete information revealed reflected in the cost of equity. Company that reveal more information about the company, it will attract more long-term investors (Petrova *et al.*, 2012). Quality financial information is proven to be able to reduce the cost of equity (Botosan, 1997). This becomes the basis of how quality information is able to reduce the costs of competition between companies, such as the cost of equity. However, there are still differences in the results of research on this matter. Botosan and Plumlee (2002) found that the broader disclosure of financial statements can increase the cost of equity, then according to Nurjanati and Rodoni (2013) and Barvidi (2015) that there is no relationship between the extent of disclosure and the cost of equity.

Theoretically, when a company disclosures is more extensive and quality, the information obtained by investors is also getting better. This can reduce the agency problem, information asymmetry that occurs between investors and the company manager. This in turn will positively influence market prices and the company's selling power, reducing the company's equity costs. This hypothesis is supported by Poshakwale and Courtis, 2005; Cheng, *et al.*, 2006; Petrova, *et al.*, 2012; Fu, *et al.*, 2012; Indayani and Mutia, 2013; Dangerous, 2017. Therefore, researchers put forward the following hypothesis:  
H<sub>1</sub> : Disclosure has a negative effect on the cost of equity

### *The Effect of Earnings Quality on The Cost of Equity*

One of the main sources of financial disclosure for investors and An important summary indicator of company performance for managers is earnings (Graham *et al.*, 2005). In addition, earnings also functions as a key input for company valuation (Francis *et al.*, 2003). Earnings information in a financial statement is the main highlight for investors and other users of financial statements. Therefore, the quality of earnings in the financial statements must have good quality or reflect the actual state of earnings in the company.

Financial statements that have poor earnings quality can cause high costs of equity borne by the company (Fatma and Abdelwahed, 2010). This becomes the basis of how the better quality of earnings in a financial report can increase investor interest and trust which ultimately can reduce the company's equity costs. This empirical evidence is supported by Barvidi (2015) and Eliwa *et al.* (2016). Therefore, researchers put forward the following hypothesis:

H<sub>2</sub> : Earnings quality has a negative effect on the cost of equity

## **Research Methodology**

The population in this study were manufacturing companies listed on the Indonesia Stock Exchange during the study period (2013-2017). In this study, the sample selection method used was the *purposive sampling method*. Data analysis and hypothesis testing are carried out with the help of the E-Views (*Econometric Views*). Calculation of the cost of equity using the CAPM approach can be formulated as follows:

$$COEC = Rf_t + (Rm_t - Rf_t) \beta_i$$

where:

COEC = *Cost of equity capital*

$Rf_t$  = Risk free *return* in period t which is proxied by the interest rate of Bank Indonesia Certificates  
 $RM_t$  = The market return in period t obtained from the composite stock price index (CSPI) on day t is reduced by the IHSG at day t-1 divided by the IHSG at t-1  
 $\beta_i$  = Non-systematic risk (beta) for each company stock i

The disclosure in this study is based on the item disclosure of the decision of the chairman of the Capital Market Supervisory Agency and Financial Institutions No: KEP-347 / BL / 2012 that the provisions concerning the presentation and disclosure of financial statements of Issuers or Public Companies are regulated in Rule Number VIII. G.7.

Measurement of earnings quality using Discretionary Accruals (DA) from the Kothari model (2005). The higher Discretionary Accruals has the lower the earnings quality. Discretionary Accruals obtained from the absolute residual value of the following equation:

$$TACC_{i,t} = \beta_0 + \beta_1 \frac{1}{ASSET_{i,t-1}} + \beta_2 \frac{(\Delta SALE_{i,t} - \Delta AR_{i,t})}{ASSET_{i,t}} + \beta_3 \frac{PPE_{i,t}}{ASSET_{i,t}} + \beta_4 ROA_{i,t} + \varepsilon_{i,t}$$

where:

$TACC_{i,t}$  : Corporate accrual total, that is earnings before extraordinary items minus operating cash flows (CFO) divided by the average total assets of companies i and years t.

$ASSET_{i,t-1}$  : Average total assets of company i in year t-1.

$ASSET_{i,t}$  : Average total assets of the company i in year t.

$\Delta SALE_{i,t}$  : Change in sales of the company i in year t.

$\Delta AR_{i,t}$  : Change in accounts receivable firm i in year t.

$PPE_{i,t}$  : Value of property, plant and equipment (fixed assets) of firm i in year t.

$ROA_{i,t}$  : Return on company assets i in year t which is calculated by dividing the company's net earnings i in year t by the total assets of the company i in year t.

$\varepsilon_{i,t}$  : Rated residual error research firm i in period t is used as the basis for the measurement of discretionary accruals (DA).

So, this equation model measures earnings quality based on discretionary accruals captured in absolute values of residual values ( $\varepsilon_{i,t}$ ). To facilitate the calculation of earnings quality, the researchers used the remaining discretionary accruals from the calculation of 100 percent.

## Results and Discussion

The regression model used in this study uses a random effect model . The inferential statistical results of random effect testing are as follows:

The results of the random effect regression analysis			
Variable	Coefficient	t-Statistics	Prob.
C	1,969450	4,620726	0.0000
Disclosure (X1)	-5,183,127	-7.082037	0.0000
Quality of Earnings (X2)	-0.729147	-5.188384	0.0000

The test results show that the hypothesis one states that disclosure financial statements negatively affect the cost of equity received. The results of this study support agency theory and signal theory which states that companies disclose information to obtain low equity costs. The results of the study are also in line with Botosan (1997), Juniarti and Yunita (2003), Poshakwale and Courtis (2005), Cheng, *et al.* (2006), Francis, *et al.* (2008), Petrova, *et al.* (2012), Fu, *et al.* (2012), and Sari (2017) that high disclosure

indicates the low cost of equity in the company. The wider the company discloses financial statements, the more transparent financial statements will be. This causes investors to estimate the risks at low companies, so that the expected rate of return by investors is also low, which in turn costs the company's equity is also low.

The second hypothesis states that earnings quality negatively affects the cost of equity. The test results show that the second hypothesis is accepted. The results of this study support agency theory and signal theory which states that companies that disclose information relevantly or reflect the actual state of the company will be able to reduce the cost of equity. The results of the study are also consistent with previous studies, namely Fatma and Abdelwahed (2010), Persakis (2015), Eliwa *et al.* (2016), Pramita (2016), and Lahaya (2017) that income is more relevant (better the quality of earnings), the lower the cost of equity issued by the company.

### **Conclusions and Recommendations**

This study is intended to examine the effect of financial statement disclosures and the quality of earnings on the cost of equity. This study examined 87 manufacturing companies listed on the Indonesia Stock Exchange during 2013-2017. The results of this study indicate that financial statement disclosure and earnings quality can reduce the company's equity costs. Investors assess that broad disclosures and relevant earnings are useful for decision making. Disclosure of financial statements can reduce the cost of equity. Similarly, companies that report quality earnings information can reduce the cost of equity. The reduced cost of equity indicates investor confidence that the information is useful for making decisions. Further studies recommended that add another variable that allegedly may affect the cost of equity, such as the quality of audit, corporate governance and others. There are other proxies that can be used by future research. For example, using another proxy in measuring the cost of equity, such as residual income or growth dividends and proxies in measuring earnings quality, such as earnings smoothing, earnings losses and increases avoidance .

### **References**

- Capital Market Supervisory Agency (BAPEPAM) and Financial Institution No: KEP-347 / BL. 2012. *Financial Statement Disclosure Checklist for All Industries in the Capital Market in Indonesia* (Regulation No.VIII.G.17).
- Barvidi, Dinilla Nur Silma. (2015). Voluntary Disclosure and Earnings Management Against the Cost of Equity Capital with Information Asymmetry as Intervening Variables. *Journal of Accounting* , Vol. 7, No. 1, p. 41-59 e- ISSN: 2502-6380.
- Bhattacharya, N., Hemang Desai, Kumar Venkataraman. (2012). Does Earnings Quality Affect Information Asymmetry? Evidence from Trading Costs. *Accounting Research* . Vol. XX No. X (XX) p. 1–36.
- Bodie, Z., Kane, A., and Marcus, AJ. (2008). *Investments* . Jakarta: Salemba Empat.

- Botosan, Christine A. 1997. Disclosure Level and the Cost of Equity Capital. *The Accounting Review* . Vol. 72, No. 3, p. 323-349.
- Botosan, Christine A. and Marlene A. Plumlee. (2002). A Re-examination of Disclosure Level and the Expected Cost of Equity Capital. *Journal of Accounting Research* . Vol. 40, No. 1 p. 21-40.
- Brigham, Eugene F and Joel F Houston. (2011). *Fundamentals of Financial Management*. Book 2 (Issue 11). Jakarta: Salemba Empat.
- Cheng, CSA, Denton Collins, Henry He Huang. (2006). Shareholder Rights, Financial Disclosure and The Cost of Equity Capital. *Review of Quantitative Financial Accounting* . 27 p. 175-204.
- Clarkson, P., J. Guedes, and R. Thompson. (1996). On diversification, observability, and measurement of estimation risk. *Journal of Financial and Quantitative Analysis* (March): p. 69-84.
- Cohen, Daniel A. (2003). Quality of Financial Reporting Choice: Determinants and Economic Consequences. *Working paper* , North-Western University.
- Dewi, Sofia Prima, and Jeffry Setiady Chandra. (2016). Effect of Voluntary Disclosure, Information Asymmetry, and Earnings Management on Cost of Equity Capital in Manufacturing Companies. *Journal of Business and Accounting*, Vol. 18, No.1, p. 25-32.
- Eliwa, Y., Jim Haslam, Santhosh Abraham. (2016). The Association Between Earnings Quality and the Cost of Equity Capital: Evidence from the UK. *International Review of Financial Analysis* . P. 1-43.
- Fatma, T. and Omri Abdelwahed. (2010). Earnings Quality and Cost of Equity Capital: Evidence from Tunisia. *International Journal of Managerial and Financial Accounting*. Vol. 2, No. 2, p. 161-176.
- Francis, Jennifer, Ryan Lafond, and Per Olsson. (2003). Earnings Quality and The Pricing Effects of Earnings Patterns. *Working paper* . Duke University and the University of Wisconsin.
- Francis, Jennifer, Nanda, Dhananjay, and Per Olsson. (2008). Voluntary Disclosure, Earnings Quality and Cost of Capital. *Journal of Accounting Research*. Vol. 46, No. 1, p. 53-99.

- Fu, Renhui, Arthur Kraft, Huai Zhang. (2012). Financial Reporting Frequency, Information Asymmetry, and The Cost of equity. *Journal of Accounting and Economics* . 54, p. 132-149.
- Gotti, G., & Mastrolia, S. (2014). Cost of capital for exempt foreign private issuers: Information risk effect or earnings quality effect? It depends. *The International Journal of Accounting* xx (2014) xxx – xxx, p. 1-31.
- Graham, John R., Campbell R. Harvey, Shiva Rajgopal. (2005). The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics* . Vol. 40, p. 3–73 .
- Heriyanthi, IGA Raka. (2013). Effects of Voluntary Disclosure and Earnings Management on Cost of Equity Capital with Information Asymmetry as Intervening Variables. *Accounting E-Journal of Udayana University* 5.2 (2013): p. 398-416.
- Ifonie, Regina, Reizky. (2012). Effect of Information Asymmetry and Earnings Management on Cost of Equity Capital in Real Estate Companies Listed on the IDX . *Accounting Student Scientific Journal* ; Vol. 1, No. 1, p. 103–107.
- Indayani, and Dewi, Mutia. (2013). Effect of Information Asymmetry and Voluntary Disclosure on Cost of Capital in Listed Manufacturing Companies on the IDX . *Accounting and Finance Review Journal*, Vol. 3, No. 1: 373-382.
- Jensen, Michael. C and Meckling, William. H. (1976). The Firm's Theory: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* . Vol. 3 No. 4, p. 305-360.
- Juniarti, and Frency Yunita. (2003). Effect of Level of Disclosure on Equity Costs. *Journal of Accountants and Finance* Vol. 5, No. 2, p. 150-168.
- Komalasari, Puput Tri and Zaki Baridwan. (2001). Information Asymmetry and Cost Of Equity Capital. *Indonesian Accounting Research Journal* . Vol. 1 (4) p. 64-81.
- Kothari, SP, Leone, AJ, and Wasley, CE (2005). Performance Matched Discretionary Accrual Measures. *Journal of Accounting and Economics* , 39 (1): 163-197.
- Lahaya, Ibn Abni. (2017). Quality of Earnings and Voluntary Disclosure of Impact on the Cost of Capital Equity Through Information Asymmetry. *Journal of Finance and Banking* , 21 (2): 188–199.

- Nasih, Moh., Puput Tri Komalasari, Moh. Madyan. (2016). The Relationship Between Earnings Quality, Information Asymmetry, and Cost of Equity Capital: Testing Using Path Analysis. *Indonesian Journal of Accounting and Finance* , Vol. 13, No. 2, p. 221 - 242.
- Nurjanati, Ratri. and Ahmad Rodoni. (2015). Effect of Information Asymmetry and Level of Disclosure on Equity Costs with Managerial Ownership as a Modderating Variable. *Journal of Business and Management* . Vol. 5, No. 24 p. 173-190.
- Persakis, Anthony. (2015). Cost of Capital, Audit and Earnings Quality under Financial Crisis: A Global Empirical Investigation. *Journal of International Financial Markets, Institutions and Money*, p. 1-82.
- Petrova, Elena, Georgios Georgakopoulos, Ioannis Sotiropoulos, Konstantinos Z, Vasileiou. (2012). Relationship between Cost of Equity Capital and Voluntary Corporate Disclosures. *International Journal of Economics and Finance* . Vol. 4, No. 3 p. 83-96.
- Poshakwale, Sunil and John K. Curtis. (2005). Disclosure Level and Cost of Equity Capital: Evidence from the Banking Industry. *Managerial and Decision Economics* . 26 p. 431-444.
- Pramita, Yulinda Devi. (2016). Quality of Earnings and Beta Against Cost of Equity Capital. *Journal of Business and Economics* Vol. 14, No. 2, p. 123-131.
- Sari, Felia Arienza. (2017). Effect of Broad Voluntary Expressions and Information Asymmetry on Cost of Equity Capital. *Journal of Accounting Science and Research* Vol. 6, No. 10, p. 1-15.
- Wulandari, Putu Prima, Sari Atmini. (2012). Effect of Mandatory Disclosure Levels and Voluntary Disclosures on Costs of Equity Capital. *Multiparadigma Accounting Journal* Vol. 3, No. 3, p. 424-440.

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).