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The Effect of Intellectual Capital Disclosure, Information Asymmetry, and Firm Size on Cost of Equity Capital with Managerial Ownership as a Moderating Variable

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ABSTRACT

This study attempts to find out the effect of intellectual capital disclosure, information asymmetry, and firm size on cost of equity capital with managerial ownership as moderating variable. Total sample used in this study is 47 companies listed in the LQ45 Index in Indonesia Stock Exchange (IDX) during the period February 2014 - January 2017. The study period was 2013-2016. The data were analyzed using a descriptive statistical analysis, ordinary least square analysis, and moderated regression analysis. The results show that intellectual capital disclosure has an effect on the cost of equity capital. Components of intellectual capital disclosure, such as human capital, structural capital, and relational capital also have a significant effect on the cost of equity capital. However, information asymmetry and firm size have no significant effect on the cost of equity capital. Managerial ownership cannot moderate the effect of intellectual capital disclosure, information asymmetry, and firm size on the cost of equity capital.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pengungkapan modal intelektual, asimetri informasi, dan ukuran perusahaan terhadap biaya modal ekuitas dengan kepemilikan manajerial sebagai variabel moderasi. Total sampel yang digunakan dalam penelitian ini adalah 47 perusahaan yang terdaftar dalam Indeks LQ45 di Bursa Efek Indonesia (BEI) selama periode Februari 2014 - Januari 2017. Periode penelitian adalah 2013-2016. Data dianalisis dengan descriptive statistical analysis, ordinary least square analysis, dan moderated regression analysis. Hasil penelitian ini menunjukkan bahwa pengungkapan modal intelektual berpengaruh terhadap biaya modal ekuitas. Komponen pengungkapan modal intelektual, seperti human capital, structural capital, dan relational capital, juga memiliki pengaruh signifikan terhadap biaya modal ekuitas. Tetapi asimetri informasi dan ukuran perusahaan tidak berpengaruh signifikan terhadap biaya modal ekuitas. Kepemilikan manajerial, sebagai variabel pemoderasi, tidak dapat memoderasi pengaruh pengungkapan modal intelektual, asimetri informasi, dan ukuran perusahaan terhadap biaya modal ekuitas.

1. INTRODUCTION

Financial statement is a statement that shows the company's financial condition either at present time or in a certain period (Kasmir, 2014: 7). In financial statement, the company's capital is presented on the liability side where there is information that the company gets a source of funds. The funds obtained by the company generally come from both their own capital and outside the company (foreign capital). The company's efforts to raise funds as operational capital need to be carried out carefully in order to minimize the size of the company's cost of capital. Botosan (2006) argues that the greater the cost of capital issued by the company, the higher the risk in investing,

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because the company's activities in conducting stock public offerings and finding source of funds will be lower. In addition, fluctuating economic conditions can also affect investors' assessment of the cost of equity capital.

Cost of equity capital is an important concept in financial management to determine whether a company's investment activity is feasible or not. Cost of equity capital can arise due to several factors, one of which is intellectual capital disclosure. This disclosure is needed to provide a reasonable and relevant report presentation so as not to cause information asymmetry between the maker and the user of the report. Information asymmetry can occur according to signaling theory and resource-based theory.

In Indonesia, intellectual capital disclosure has not been fully regulated so that the information disclosure related to intellectual capital is still relatively low and less voluntary. According to Li et al. (2012), intellectual capital disclosure is one way to evaluate the amount of profits and costs of a company. Boujelbene and Affes (2013) in their research reveal that there is an influence of each component of intellectual capital on the cost of equity capital

Information asymmetry and firm size can influence the company's cost of equity capital. Information asymmetry is a condition where one party has more information than the other. The results of the research conducted by Ratri and Ahmad (2015) show that information asymmetry and managerial ownership have a significant effect on the cost of equity capital, whereas in the research conducted by Rini and Nita (2016) it is stated that information asymmetry has no effect on the cost of equity capital.

Firm size can influence investors for determining the level of the company's cost of equity capital. Research conducted by Lisa and Yasser (2015) stated that firm size has a negative effect on the cost of equity capital, in which the greater the size of the company, the lower the cost of equity capital of the company.

This study uses managerial ownership as moderating variable, a variable that can influence the relationship between the independent variables (intellectual capital disclosure, information asymmetry, and firm size) and the dependent variable (the cost of equity capital). The presence of managerial ownership can influence management policy because management is also a shareholder of the company. The use of managerial ownership as moderating variable was applied in the research conducted by Ratri and Ahmad (2015). Managerial ownership is a shareholder of management who actively participates in company decision making (Directors and Commissioners). Managerial ownership is measured by the percentage of shares held by managers (Rustendi & Jimmi (2008).

This study uses a sample of companies listed on the LQ 45 Index on the Indonesia Stock Exchange (ISE) for the period February 1, 2014 - January 1, 2017. The use of the companies listed on the LQ45 index is because the companies have a significant capitalization rate. High capitalization based on expenditure indicates that a company incurs costs to obtain benefits, quality, and capacity of asset in the future. Based on the background described above, the researchers take the title "The Effect of Intellectual Capital Disclosure, Information Asymmetry, and Firm Size on the Cost of Equity Capital with Managerial Ownership as a Moderating Variable".

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Intellectual Capital Disclosure

There are some proponents concerning the definition of intellectual capital. For example, Kencana et al. (2014) define intellectual capital as a knowledge resource obtained from workers, customers, processes and technology that can be used in the process of creating value for a company. Intellectual capital disclosure has an important role as the company's strategic information.

Another one is Widjarnako in Ahmadi (2012), in which he describes that there are five reasons why companies disclose intellectual capital: (1) Intellectual capital disclosure can help organizations formulate business strategies. (2) Intellectual capital disclosure can lead to the development of key performance indicators of the company that will help evaluate the results of strategy achievement. (3) Intellectual capital disclosure can help evaluate company mergers and acquisitions, especially to determine the prices paid by companies that make acquisitions. (4) Intellectual capital disclosure can be linked to intensive plans and corporate compensation. (5) Intellectual capital disclosure can communicate to external stakeholders about intellectual property owned by the company.

Human Capital

Human capital is the most important part of intellectual capital (Mangena et al, 2010). One of the sources of human capital is innovation or improvement. Human capital is also a source of useful knowledge, skills and competencies in a company. Human capital reflects the company's ability to collectively produce the best solution based on the knowledge that is owned by everyone in a company. Human capital will increase if the company can use the knowledge possessed by their employees and important resources that can be done through training, experience, expertise, and understanding of managers and employees within a company.

Structural Capital

Structural capital is a company's ability to fulfill its routines and corporate structures that support employees' efforts to produce optimal performance (Tjiptohadi, 2003) for example: innovation, technology, management philosophy, organizational flexibility and all forms of intellectual property owned by the company. Structural capital consists of two important elements: intellectual property and infrastructure assets (Joko and Mari, 2010). Intellectual property is an element protected by law, such as patents, copyrights, and trademarks, while infrastructure assets are intellectual capital elements that can be created by companies.

Relational Capital

Relational capital is a relationship that exists between the company and external parties as a part that supports the smooth running of business activities and can provide added value for the company (Tjiptohadi 2003). Relational capital also includes market knowledge, relationships with consumers, suppliers, and government, as well as industrial networks of companies (Mangena et al., 2010). The relationship that exists between the company and external parties is a part that supports the smooth running of business activities and will be able to provide added value to the company.

Information Asymmetry

Information asymmetry is a condition where one party has more information than the other party. According to Scott (2012), there are two types of information asymmetry: (1) Adverse selection. It is a type of information asymmetry that occurs because one or more groups in business transactions have more advantageous information than other groups. (2) Moral hazard. It is a type of information asymmetry that occurs because one or more groups in business transactions or potential transactions can monitor the extent of their actions in fulfilling the transactions but other groups cannot. This problem arises because of the separation of ownership and control which is characteristic of most forms of the company. Information asymmetry is a conflict that often occurs between the principal and agent because there is a separation of ownership supported by agency theory, in which the agent has direct information access to company information and the agent can cover information from the principal for personal gain.

Firm Size

Nuryaman (2008) argues that firm size is the size of the company and is a measure of the availability of information published by the company. The firm size can be measured by Log Natural total assets. Firm size is a variable considered in many financial studies. This is due to the alleged number of decisions or financial results influenced by the size of the company. The value of total assets is usually very large when compared with other variables. So, the variable of firm size is refined by using Log Natural (LN) total assets in order to reduce the chance of heteroscedasticity.

Managerial Ownership

Managerial ownership is a share ownership by management who actively participates in company decision making (Directors and Commissioners). Managerial ownership is measured by the percentage of shares held by managers (Rustendi & Jimmi (2008).

The policy of a manager who has shares in the company will be different from the policy of a manager who is pure as the manager. A manager who also serves as a shareholder does not want the company to go bankrupt because it can eliminate incentives and the shareholder will lose the return on invested funds.

The higher the managerial ownership in a company, the harder the management work to improve the performance of the company, in this case it will have a good impact on the company and help unify interests between managers and shareholders. In addition, management will also take the direct impact of the decision taken. Managerial ownership is measured by the number of shares held by

management divided by the number of shares outstanding.

Cost of Equity Capital

Cost of equity is the cost incurred by the company in the form of rate of return which is expected by investors for the capital investments given to companies (Botosan 2006). Brigham and Houston (2011: 12) state that equity obtained by issuing shares has a higher cost than equity obtained from retained earnings. It can be concluded that it is better for companies to use internal funds (retained earnings) than external funds (issuing new shares) to finance the company's operation.

There are several trends that companies want to maximize value for shareholders. If the company's prospect is good, management will use retained earnings so that this condition can be enjoyed by current shareholders, but if the company's prospect is not good, the company's management tends to issue new shares to obtain funds. In this research, the cost of equity capital is measured through retained earnings.

The Effect of Intellectual Capital Disclosure on Cost of Equity Capital

The demand for information disclosure is getting higher because there are information asymmetry and agency conflicts between companies and outside investors. One way to reduce information asymmetry is to conduct disclosure. Disclosure can minimize the problems caused by information asymmetry and provide benefits to the company both in their internal and external activities. Investors trust companies that have good quality human capital because they can produce the return they expect (Mangena et al. 2010). The annual report provides information about the relationship between the company and its partners. Information disclosure to users is presented by the company as a feedback that is supported by various parties so as to create mutually beneficial relationships. From this explanation it can be concluded that the higher the level of intellectual capital disclosure component carried out by the company, the smaller the cost of equity capital in the company will be.

H1: *Intellectual capital disclosure has a significant effect on the cost of equity capital.*

The Effect of Human Capital on Cost of Equity Capital

The first element is human capital. Human capital is one of the resources for the company which includes training, experience, expertise, and understanding of managers and employees within a company. The better the performance of the company's human capital, the lower the cost of equity capital. Investors trust companies that have good quality human capital because they can produce the return they expect (Mangena et al. 2010).

In addition, good management can reduce the cost of equity because by getting high profits, the company can return the funds invested by investors by using retained earnings without having to sell new shares.

H2a: Human capital has a significant effect on the cost of equity capital.

The Effect of Structural Capital on Cost of Equity Capital

The second element is structural capital. Structural capital is the company's ability to support employees' efforts to produce productive, effective and innovative performance. Structural capital has an important role to support the company's productivity. One measure of productivity is the company's ability to generate profits for the company. High profits can help companies use internal funds more than external funds as a source of funds to finance all of the company's operational activities. In addition, retained earnings owned by the company can be used to return funds that have been invested by investors without having to sell new shares which make the company pay the cost of issuing shares.

H2b:*Structural capital has a significant effect on the cost of equity capital.*

The Effect of Relational Capital on Cost of Equity Capital

The third element is relational capital. Relational capital is a relationship that exists between companies and external parties as a part that supports the smooth running of business activities and can provide added value for the company (Tjiptohadi, 2003). The annual report provides information about the relationship between the company and its partners. Information provided to report users is presented by the company as a feedback that is supported by various parties so as to create mutually beneficial relationships. This

can benefit the company because the sources of funds obtained from the internal can cover the operational costs of the company without having to pay the cost of issuing shares to get funds from investors.

H2c:*Relational capital has a significant effect on the cost of equity capital.*

The Effect of Information Asymmetry on Cost of Equity Capital

Information asymmetry is information inequality between managers and shareholders or stakeholders, where managers know more about internal information and company prospects in the future than shareholders (Scott, 2012). When information asymmetry arises, the disclosure decisions made by managers can affect stock prices because information asymmetry between more informed investors and less informed investors raises transaction costs and reduces expected liquidity of company shares in the market. The results of the research on the effect of information asymmetry on the cost of equity capital show that if a company has high information asymmetry, investors will estimate high risk and ultimately the cost of equity capital borne by the company will be high, because the level of risk is directly proportional to the rate of return expected by the investors.

H3: *Information asymmetry has a significant effect on the cost of equity capital.*

The Effect of Firm Size on Cost of Equity Capital

Research conducted by Purwaningtias and Surifah (2015) shows that firm size has a positive effect on the cost of equity, so the larger the size of the company, the higher the cost of equity. This can occur because the firm size has a significant influence on the cost of equity capital. Large companies will be easier to obtain loans than small companies.

H4: *Firm size has a significant effect on the cost of equity capital.*

The Effect of Intellectual Capital Disclosure, with Managerial Ownership as the moderating variable, on the Cost of Equity Capital

The greater the percentage of managerial ownership in a company, the better the performance of the company management, which in turn will have an impact on the investor's assessment of the company. One way to give a positive signal to investors is to disclose the company's intellectual capital. The higher the voluntary disclosure of the company, the lower the risk borne by investors.

H4: *Managerial ownership can moderate the effect of intellectual capital disclosure on the cost of equity capital.*

The Effect of Information Asymmetry, with Managerial Ownership as the Moderating Variable, on the Cost of Equity Capital

Managerial ownership can reduce information asymmetry between management and shareholders because it is considered an instrument that reduces information imbalance between insiders and outsiders through disclosure of company information. This is in accordance with the agency theory in which when a company has a high percentage of managerial ownership, management will have a sense of belonging and can equalize the interest of management and that of shareholders. The existence of information asymmetry also causes investors to demand a large return on their investment.

H5: *Managerial ownership can moderate the effect of information asymmetry on the cost of equity capital.*

The Effect of Firm Size, with Managerial Ownership as the Moderating Variable, on the Cost of Equity Capital

Managerial ownership as the majority shareholder can affect the size of the company because when the company has high managerial ownership, management will seek to improve company performance so that the company can expand its assets (Rustendi & Jimmi (2008). This can make companies with high managerial ownership enlarge the size of the company.

H6: *Managerial ownership can moderate the effect of firm size on the cost of equity capital.*

The framework underlying this research is demonstrated in Figure 1.

3. RESEARCH METHOD

Sample Classification

The population consists of companies listed on the LQ 45 Index on the Indonesia Stock Exchange (IDX). This study uses companies listed in the LQ 45 Index because the companies have high liquidity, large market capitalization value, and also stocks that have good fundamentals and performance. Announcement of companies listed on the LQ 45 Index is conducted 2 times in one year: February and August. The sample of this

study is companies listed on the LQ 45 Index on the Indonesia Stock Exchange (IDX) which published annual reports from 2014-2016.

Sampling is conducted using purposive sampling method. Purposive sampling method is a method of collecting samples based on certain criteria. The criteria used in collecting the samples are as follows: (1) Companies registered in the LQ 45 Index shares for the period of 1 February 2014 - 1 January 2017 on the Indonesia Stock Exchange. (2) Companies registered in the LQ 45 Index shares that published sequential annual reports in the period 2013-2016 and had complete data regarding the required variables.

Research Data

The study used secondary data accessed and obtained from the website www.idx.co.id., annual report data, index principal elements, share ownership structure, historical stock price data (high and low), historical stock price data (close), and historical dividend data on LQ 45 Index companies listed on the Indonesia Stock Exchange for the period 2014-2016. The data collection method used in this study is the documentation method, the technique of data collection carried out by studying and recording notes on existing documents.

Research Variable

The variables used in this study are: 1) the dependent variable (cost of equity capital); 2) the independent variables consisting of intellectual capital disclosure (human capital, structural capital, and relational capital), information asymmetry and firm size; and 3) the moderating variable (managerial ownership).

Operational Definition of Variables

Intellectual Capital Disclosure

Intellectual capital disclosure is proxied by intellectual capital disclosure index. Regulation of Capital Market and Financial Institutions Supervisory Agency (Bapepam-LK) Number XK6 of 2006 issued mandatory disclosure items for annual reporting in Indonesia regarding the obligation to submit annual reports for Issuers or Public Companies so that the total voluntary intellectual capital disclosures in this study are 48 items consisting of Human Capital, Structural Capital, and Relational Capital (Barus and Siregar, 2014).

The percentage of intellectual capital disclosure is calculated using the following formula:

ICD index = (Σdi / M) x 100%

Note:

ICD index= Total number of intellectual capital disclosure index

di = 1 if disclosed in annual report, and 0 if not disclosed in annual report.

M = Total number of items measured (48 items)

Information Asymmetry

Information asymmetry is measured by projecting it with bid ask spread because it cannot be directly observed. In addition, Information asymmetry can be identified from the price when asking the company's share *bid* price, that is, the percentage difference between selling price and purchase price of company's share for one year divided by half the selling price and share purchase price. When share price rises (high), stakeholders will offer shares

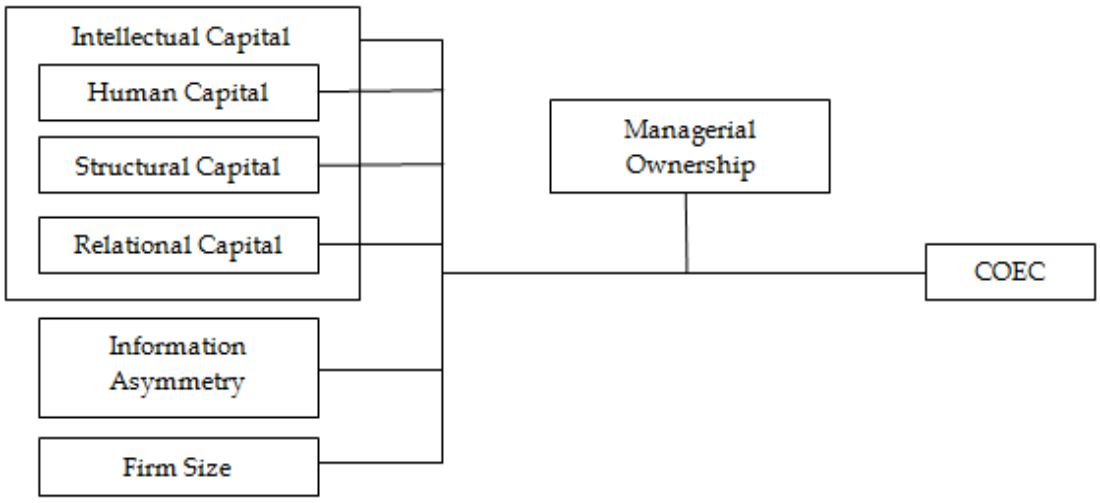

Figure 1
Research Framework

(bid) where in these conditions stakeholders sell shares. Conversely, when the share price drops (low) there will be a request (ask) because the share price falls. The measurement of information asymmetry is done using the *relative bid ask spread* which is operated as follows (Ifonie, 2012):

$$\textbf{RBAt} = \frac{\textbf{(Ha - Hb) x 100\%}}{\textbf{½ (Ha + Hb)}}$$

Note:
RBAt = Bid-ask-spread in period t
Ha = Price of sale offer in period t
Hb = Price of purchase offer in period t

Firm Size

According to Said Kelana (2005:274), in general firm size is proxied by total assets. The value of total assets is usually very large when compared with other variables so the firm size variable is refined by using the Log Natural (LN) total assets to reduce the chance of heteroscedasticity which can be formulated as follows

FS = Ln Total Asset

Note:
FS : Firm Size
Total Asset : Number of assets owned company.

Cost of Equity Capital

One way to estimate the cost of equity is to use retained earnings (Brigham and Houston, 2006: 472). The management decision, whether the profits will be distributed to investors in the form of dividends or will be retained to be invested again, has an effect on the cost of capital to be incurred by the company in the future. The formula used is:

$$K_s = \frac{D_1}{P_0} + g$$

Note:
K_s = cost of own capital using retained earnings
D_0 = dividend distributed in the current period
D_1 = dividend that will be distributed in the coming period
P_0 = current stock price / closing price
g = estimation of dividend growth rate

Managerial Ownership (MO)

Managerial ownership is the percentage of share ownership by directors, management, commissioners and any parties directly involved in making decisions. Managerial ownership is calculated using the following formula:

$$\text{Percentage of MO} = \frac{\text{Share owned by management}}{\text{Total Outstanding Shares}} \times 100\%$$

Analysis Tool

The data were analyzed using a descriptive data analysis, normality test, multicollinearity test, autocorrelation test, heteroscedasticity test, moderation regression analysis, model test, determination coefficient test, and t statistical test to test the effect of independent variables and dependent variables with moderating variable.

This interaction test is often called the Moderated Regression Analysis (MRA), a special application of multiple linear regression analysis where the regression equation contains an element of interaction (multiplying two or more independent variables). The calculation of the proposed hypothesis for H1, H2a, H2b, H2c H3, and H4 is done using the regression equation as follows:

$$COEC = \alpha + \beta_1 ICD + \beta 2HC + \beta 3SC + \beta 4RC + \beta 5IA + \beta 6FS + e \ldots\ldots (1)$$

The second MRA model equation is to determine the effect of intellectual capital disclosure, information asymmetry and firm size on cost of equity capital with managerial ownership as a moderating variable (testing hypotheses H5, H6, and H7):

$$COEC = \alpha + \beta_1 ICD + \beta_2 IA + \beta_3 FS + \beta_4 MO + \beta_5 ICD*MO + \beta_6 AI*MO + \beta_7 FS*MO + e \ldots\ldots (2)$$

Note:
COEC = cost of equity capital
α = constant
β_1 - β_7 = regression coefficient
ICD = intellectual capital disclosure
HC = human capital disclosure
SC = structural capital disclosure
RC = relational capital disclosure
IA = information asymmetry
FS = firm size
MO = managerial ownership
ICD*MO = interaction between ICD and MO
IA*MO = interaction between IA and MO
FS*MO = interaction between FS and MO
e = error

4. RESEARCH RESULTS AND DISCUSSION

The sample consists of 47 observed data. The dependent variable is cost of equity capital (COEC), while the independent variables are intellectual capital disclosure (ICD), human capital (HC), structural capital (SC), relational capital (RC), information asymmetry (IA), and firm size (FS), with the moderating variable is managerial ownership (MO). Based on Table 1, it can be seen the minimum value, maximum value, mean value, and standard deviation value for each variable

Before testing the hypotheses, it is necessary to do an analysis prerequisite test. Based on normality test, the Asymp. Sig. (2-tailed) value is distributed normally because the value of Asymp. Sig. (2-tailed) is 0.200> 0.05. Multicollinearity test produces VIF and tolerance values of each variable. The tolerance values for the three variables > 0.10 and VIF values < 10. Autocorrelation test is conducted using run test where the value of asymp. Sig (2-tailed) is 1.000 > 0.05, so it can be concluded that there is no autocorrelation in the data. Based on these results it can be concluded that the regression model used is free from multicollinearity between independent variables. Heteroscedasticity test shows that there is no clear pattern, and the points spread above and below the number 0 on the Y axis, so there is no heteroscedasticity.

Based on Table 2, the results of F test (ANOVA), the simultaneous hypothesis testing produces F value of 3.359 with a significance level of 0.009 <0.05. These results indicate that the variables of intellectual capital disclosure (human capital, structural capital and relational capital), information asymmetry and firm size simultaneously influence the cost of equity capital.

Table 3, shows that the level of determination (R^2) is 0.235 or 23.5%. This shows that 23.5% of the cost of equity capital can be explained by the variables of intellectual capital disclosure (consisting of human capital, structural capital and relational capital), information asymmetry and firm size, while the remaining 76.5% (100% - 23.5%) are explained by other variables outside of this study.

This test is carried out by using the t-statistical test to find the effect of information asymmetry, intellectual capital disclosure, and audit quality on the cost of equity capital as the

Table 1
Results of Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
COEC	47	.030	.100	.05426	.014103
HC	47	.530	.760	.68702	.064670
SC	47	.870	.930	.92489	.016923
RC	47	.630	.810	.73468	.056601
ICD	47	.730	.830	.77638	.036619
AI	47	.210	1.070	.49170	.176183
UP	47	29.020	34.150	31.35723	1.562854
KM	47	.000	.720	.11468	.193950

Source: Processed data

Table 2
Results of F Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.003	6	.001	3.359	.009[b]

Source: Processed data

Table 3
Results of R Square Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579[a]	.335	.235	.012332

Source: Processed data

dependent variable. The basis of the decision taken is to see the significance level which is less than 0.05 (5%). Based on the test results in Table 4, it can be concluded that the first component of Intellectual capital disclosure, human capital obtains the T value of -2,569 with a significance level of 0.014 < 0.05. The second component, structural capital obtains the t-value of -2,063 with a significance level of 0.046 < 0.05. The third component, relational capital obtains the t-value of -2.701 with a significance level of 0.010 < 0.05. The variable of information asymmetry obtains the T value of 1.721 with a significance level of 0.093 > 0.05, and the variable of firm size obtains the t-value of 0.514 with a significance level of 0.610> 0.05.

The results of the significance value show that the hypotheses H1, H2a, H2b, H2c have a significant effect on the cost of equity capital. But, the hypotheses H3 and H4 do not have significant effect on the cost of equity capital.

Table 5
Results of MRA Test

Model	t	Sig.
ICD X MO	1.048	0.301
IA X MO	-0.265	0.793
FS X MO	-1.021	0.313

Source: Processed data

Based on Table 5, on the testing of the effect of intellectual capital disclosure, information asymmetry and firm size on cost of equity capital with managerial ownership as moderating variables, the moderating significance value between intellectual capital disclosure and managerial ownership is 0.301 > 0.05, the moderating significance value between information asymmetry and managerial ownership is 0.793 > 0.05, and the moderating significance value between firm size and managerial ownership is 0.313 > 0.05. This means that the moderating variables of intellectual capital disclosure, information asymmetry, firm size and managerial ownership do not have a significant effect on the cost of equity capital. Since β_5, β_6, and β_7 in the second regression model have significant values of ≥ 0.05, managerial ownership cannot moderate the relationship between the independent variables and the dependent variable.

Discussion

Based on the test results, it can be concluded that:

1. The first hypothesis (H1) test result shows that intellectual capital disclosure has a significant effect on the cost of equity capital. This means that the more companies disclose intellectual capital disclosure, the higher the cost of equity capital of the company that will be issued. The result of this research is in accordance with the result of research conducted by Barus and Siregar (2014) that intellectual capital disclosure has a significant effect on the cost of equity but in different direction. The result of this research is not consistent with the result of the research conducted by Rini and Nita (2016) and Putri and Nova (2015) that intellectual capital disclosure has no effect on the cost of equity capital.
2. The second hypothesis (H2a) test result shows that human capital component has a significant effect on the cost of equity capital. The human capital component has an influence on companies related to competitive advantage that utilizes resources such as employees (human capital). If human capital is managed and maximized well, it will be able to create value added for the company and have an impact on the company's performance. This research is supported by previous study conducted by Boujelbene and Affes

Table 4
Results of T Test

Variable	t	Sig
(Constant)	-1.057	0.297
Human Capital (HC)	-2.569	0.014
Structural Capital (SC)	-2.063	0.046
Relational Capital (RC)	-2.701	0.010
Intellectual Capital Disclosure (ICD)	2.611	0.013
Information Asymmetry (IA)	1.721	0.093
Firm Size (FS)	0.514	0.610

Source: Processed data

(2013) that the component of human capital has an effect on the cost of equity capital.

3. The third hypothesis (H2b) test result shows that structural capital component has a significant effect on the cost of equity capital. Structural capital is the company's ability to fulfill its routines and corporate structures that support employees' efforts to produce optimal performance. The result of this study supports the result of the research conducted by Barus and Siregar (2014) and Boujelbene and Affes (2013). But the result of this study is not in accordance with the result of the research conducted by Talaromi and Nezhad (2103) that structural capital has no effect on the cost of equity capital.
4. The fourth hypothesis (H2c) test result shows that relational capital component has a significant effect on the cost of equity capital. The relationship between the company and external parties is a part that supports the smooth running of business activities and can provide added value for the company. The submission of information to report users is presented by the company as the company feedback that is supported by various parties so as to create mutually beneficial relationships. The result of this study does not support the research conducted by Putri and Nova (2015) that relational capital has no effect on the cost of equity capital.
5. The fifth hypothesis (H3) test shows that information asymmetry has no significant effect on the cost of equity capital. Information asymmetry does not have an effect when investors cannot read the positive signals given by the company, so that the quality of information related to the company cannot reduce information asymmetry and minimize the risk of the return on the shares invested in the company. The result of this study supports the result of the research conducted by Rini and Nita (2016) that information asymmetry has no significant effect on cost of equity capital. But the result of this study is not consistent with the result of the research conducted byNoer (2016) and Ratri & Ahmad (2015) that information asymmetry has an effect on cost of equity capital.
6. The result of the sixth hypothesis (H4) test shows that firm size has no significant effect on the cost of equity capital. Large Companies do not always get a high return in accordance with the expected rate of return. In addition, the sample used in this study is companies with high market capitalization so that there is a lack of expectations of investors in making decisions on financial results that are influenced or not influenced by the firm size. The result of this study is not consistent with the result of the research conducted by Lisa and Yasser (2015) that firm size has a significant effect on the cost of equity capital.
7. The result of the seventh hypothesis (H5) test shows that managerial ownership is not able to moderate the relationship between intellectual capital disclosure and the cost of equity capital. The research result shows a significance value of 0.301> 0.05 which indicates that managerial ownership as measured by the percentage of managerial share ownership cannot moderate the relationship between intellectual capital disclosure as measured by index scores and cost of equity capital which is proxied by the cost of retained earnings. The result of this study does not support the result of the research conducted by Ratri and Ahmad (2015) that managerial ownership strengthens the influence of information asymmetry and the level of disclosure on the cost of equity capital.
8. The result of the eight hypothesis (H6) test shows that managerial ownership is not able to moderate the relationship between information asymmetry and the cost of equity capital. The research result shows a significance value of 0.793> 0.05 which indicates that managerial ownership as measured by the percentage of managerial share ownership cannot moderate the relationship between information asymmetry measured using the bid-ask spread and the cost of equity capital which is proxied by the cost of retained earnings. This result is contrary to the result of the research conducted by Ratri & Ahmad (2015).

5. CONCLUSION, LIMITATION, AND SUGGESTION

As has been analyzed and discussed, it can be concluded that intellectual capital disclosure and its components have a significant effect on the cost of equity capital, while information asymmetry and firm size have no significant

effect on the cost of equity capital. Managerial ownership is not able to moderate the effect of intellectual capital disclosure, information asymmetry and firm size on the cost of equity capital.

In this study, there were several companies that could not survive in the LQ45 Index for the period of 1 February 2014 - January 1, 2017. There was also an element of subjectivity of researchers in determining scores based on the intellectual capital disclosure index by Barus Siregar (2014) so that it produced different assumptions by several researchers.

Future studies are expected to add other variables that can be factors that influence the cost of equity capital, such as audit quality, and to project ways of measuring cost of equity capital, such as Bond-Yield Plus Risk Premium and CAPM (Capital Asset Pricing Model).

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