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# Interaction of Intellectual Capital Disclosure and Financial Performance Against Market Capitalization: Evidence From Financial Sector and Telecommunication Companies in Indonesia

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Abstract. This research is aimed to explain the influence on intellectual capital disclosure and firms financial performance on market capitalization. This research uses secondary data from annual report of financial sector and telecommunication companies that listed in Indonesian stok exchange (BEI) in period 2012 – 2016. The research use a quantitative approach with method the classical assumption testing and hypothesis testi in multiple linear regression method. The result of this research showed that the variables of intellectual capital disclosure influenced positively and significantly on market capitalization and firms financial performance with ROA,ROE, EPS as proxy influenced positively and significantly on market capitalizatio.

**Keyword** - Intellectual Capital Disclosure; Firms Financial Performance Return on Asset (ROA; Return on Equity (ROE); Earning Per Share (EPS); Market Capitalization

#### I. Introduction

Globalization has provided major developments in the development of the world ranging from technological developments to science and knowledge. Current world business and economic practices are highly demanding innovations and creativity based on intellectual, knowledge, and technology, which are for IC companies that are very intensive (Hermawan, dkk., 2015). Digital age business players are always racing in advancing the company by trying to combine ideas and thoughts in creating new innovations that will facilitate the performance of the company that is run. New innovations created are not just to compete competitively. As said by Rachmi and Ardiyanto (2014) that Innovations are developed and designed to be a new work of copyright and can be applied to improve and change existing management patterns within the company itself, for example in the fields of technology and science which will later make knowledge based business management (knowledge based business).

Intellectual capital (intellectual capital) means a knowledge, information and intellectual property that is able to find opportunities and manage threats in the life of a company, so that it can affect endurance and competitive advantage in a variety of things (Nugroho, 2012). Hermawan, dkk. (2015) define intellectual capital according to some experts, namely intellectual capital as an intangible asset whose benefits to the company are performance improvement, high competitiveness and prosperity. Disclosure of information about intellectual capital in the annual financial statements is one of the voluntary disclosures (Rachmi and Ardiyanto, 2014). Thus the company must be able to provide intellectual capital information in financial statements that are disclosed in order to increase the market value of the company and increase investor confidence to be interested in investing.

According to Prabowo and Purwanto (2015) companies have the opportunity to build trust with stakeholders, improve external reputation, reduce information asymmetry in the capital market, reduce capital costs, and reflect market performance by disclosing and measuring intellectual capital.

Khan and Rasheed (2015) stated that financial performance shows a continuous progress for the company such as sustainable human resources, business progress and investor's stock returns. The value of the company will be reflected in the price of shares as said (Hermawan and Maf'ulah, 2014). Financial ratio analysis is a tool that can be used in analyzing financial performance that aims to attract investors to analyze the ratio before investing, and financial performance in this study is proxied using profitability ratios and market values. ROA, ROE and EPS.

ROA is useful to know the impact of Intellectual Capital on the use of assets (Hermawan and Mardiyanti, 2016). ROE is the ratio of capital to net profit after tax. Through ROE shareholders can find out the level of profitability of capital that has been invested in generating profits (Hidayati, 2013). Earning Per Share (EPS), which is a comparison between the amount of net profit received by investors against the number of shares owned. A high EPS value indicates the greater shareholder profits (Safitri, 2013). If the EPS of the company is high, more investors will want to buy the stock so the stock price rises (Sudarno and Pratiwi, 2017).

Market capitalization is a reflection of the overall stock price owned by the company. Things that can affect the movement of stock prices are financial statements. Good company performance will get a good assessment in the eyes of investors, this can be seen from how much demand for company shares. Increasing the demand for shares also increases the price of the company's shares.

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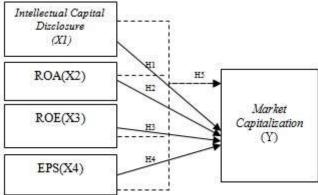
In research conducted by several previous researchers, among others, Abdolmohammadi (2005), Taliyang, dkk. (2014), Rachmi and Ardiyanto (2014), ALShubiri (2015) and Mudliar (2016) get research results that intellectual capital has a significant positive effect on market capitalization. Intellectual capital is important to be disclosed by the company because it is very important considering the information that will be obtained by the stakeholders (Sawarjuwono and Kadir, 2004). Because investors need accurate information and don't want asymmetrical information. Kamth (2015) explains that information asymmetry can be reduced by processing more information sent to other parties concerned. A high quality company is better off sending signals about the company's advantages to the market.

For research on financial performance towards capitalization, several studies have been carried out, including research on the measurement of financial performance of EVA, TSR, ROA companies, affecting market capitalization, while ROE and EPS have no effect on market capitalization. (Darmawan and Rina, 2008). This research is also consistent with research conducted by Hidayati (2013) the result is ROA affects market capitalization. Research by Prasetya (2000) and Novita (2012), shows that ROE has a positive effect on stock returns. And the results of the study were supported by Handoko (2008) states the results of EPS research have the most dominant influence on changes in stock prices. In research conducted in Indonesia by Hidayati (2013) The results show that ROE has no effect on market capitalization, but the latest research shows that the company's financial performance results are proxied by profitability ratios (GPM, NPM, ROCE, ROE and RonW) and market value ratios (EPS, PER and DPR), which are only ROCE ratios, ROE and EPS which have a positive effect on market capitalization (Prasad and Shrimal, 2015). And research by Kamath (2015) get research results that the ROE relationship has a significant effect on market capitalization. With the differences in the results of research that has been done by several previous studies, the researcher wants to test the effect of intellectual capital disclosure and financial performance of companies on market capitalization. The study was conducted using data from financial sector companies and Indonesian telecommunications companies listed on the Indonesia Stock Exchange during the 2012-2016 period.

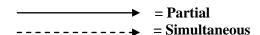
#### II. Methods

### Research sample

The sample selection in this study used a purposive sampling method. Purposive sampling is a sampling technique using certain criteria or considerations Sugiyono (2014). The population in this study are all financial sector companies and all telecommunications sector companies listed on the Indonesia Stock Exchange (IDX) in the 2012-2016 period.



**Figure 1.** Conceptual framework



## B. Operational definition and measurement Of variables

Dependent variable

1. Intellectual capital disclosure

Intellectual capital is the intangible assets of a company that includes knowledge, relationships with customers or other companies, brands, processes, and technology (Ningsih and Laksito, 2014). Intellectual capital disclosure aims to reduce the level of information asymmetry that makes the company's capital costs lower. Intellectual Capital Disclosure is measured by giving a score where a value of 1 will be given for each item disclosed by the company through the annual report, otherwise if there

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are no items disclosed in the annual report, then a value of 0 is given (Abdolmohammadi, 2005). ICD can be measured by the formula:

ICD index = 
$$\frac{\sum Dj}{n}$$

Where:

ICD index = independent variable intellectual capital disclosure index.

Di = value 1 is given if an item is disclosed in the annual report, and value 0 is given if no item is revealed in the annual report.

n = total of items measured.

#### 2. Return on total assets (ROA)

ROA is a measurement of financial performance that looks at how assets owned by a company can generate profits by looking at the capital invested (Hidayati, 2013). The higher the level of the ratio obtained, the higher the level of efficiency of the company's management in using its assets to produce a certain amount of net income. ROA calculation can be measured by the formula (Ardhila, 2016):  $ROA = \frac{\text{Net Income}}{Total \ Assets} x \ 100\%$ 

$$ROA = \frac{Net Income}{Total Assets} x 100\%$$

### 3. Return on equity (ROE)

ROE is a comparison between a company's net profit and its own capital. This ratio explains which part of the profit comes from own capital. Calculations using ROE are used to measure the level of company performance to reveal how a company benefits by utilizing the funds obtained from investors (Hermawan and Mardiyanti, 2016).

$$ROE = \frac{Net Income}{Equity} x 100\%$$

## 4. Earning per share (EPS)

EPS measures how much net income the company generates for each share outstanding & is one indicator of the success of a company (Sudarno and Pratiwi, 2017). Earning Per Share (EPS) is one part of the market valuation ratio that shows how much rupiah can be obtained for each common stock. A high EPS value indicates the greater shareholder profits (Safitri, 2013).

EPS = 
$$\frac{\text{Net Income}}{\text{Number of shares outstanding}} \times 100\%$$

## 5. Market capitalization

Market capitalization is a reflection of the overall price of shares owned by the company. Market capitalization measurement is done by multiplying the stock market price at the end of the financial year with the number of shares outstanding (Rachmi and Ardiyanto, 2014). MCAP calculation formula:

 $Market\ Capitalization = Number\ of\ shares\ outstanding\ X\ stock\ price$ 

To simplify the processing and description of research results, market capitalization variable data will be converted to natural logarithms.

### C. Hypothesis testing

This research uses SPSS program assistance for perform statistical data analysis. In this study the research test used multiple regression analysis methods. The study conducted a determinant test R2 of the T test. The R2 test was used to measure how much the ability of the independent variable in explaining the dependent variable was tested through the coefficient of determination test. T test was conducted with the aim of knowing whether each independent variable has a partial effect on the dependent variable. F test is performed to determine whether all independent variables have a joint or simultaneous influence on the dependent variable.

## III. Findings and Discussion

## A. Hypothesis test results:

#### 1. Descriptive statistic test results

It can be seen in table 1 that the ICD variable has a mean value of 0.9493 with a standard deviation of 0.99827. With a minimum value of 0.66 and a maximum value of 8.52. The ROA variable has a mean value of 0.0355 with a standard deviation value of 0.02100. The minimum ROA variable value is 0 and the maximum

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value is 10. The ROE variable has a mean value of 0.1820 with a standard deviation value of 0.07862. With a minimum ROE variable value of 0.03 and a maximum value of 0.39. The EPS variable has a mean value of 353.7333 with a standard deviation value of 294.667632. The minimum value of the EPS variable is 12.00 and the maximum value is 1072.

#### 2. T test results

It can be seen in Table 2 that the significance value of the independent variable Intellectual Capital disclosure (X1) is 0.002 where this value is smaller than 0.05 (0.002 < 0.05). Then it can be concluded that Ho was rejected and H1 accepted. Thus it can be interpreted that (X1) Intellectual Capital disclosure partially influences market capitalization.

The significance value of the independent variable ROA (X2) is 0,000 where this value is smaller than 0.05 (0,000 <0.05). Thus ROA partially influences market capitalization. Then *got it* it was concluded that Ho was rejected and H1 was accepted. Thus it can be interpreted that (X2) ROA affects market capitalization.

The significance value of the independent variable ROE (X3) is 0.002 where this value is smaller than 0.05 (0.002 < 0.05). Then it can be concluded that Ho was rejected and H1 accepted. Thus it can be interpreted that (X3) ROE partially influences market capitalization.

The significance value of the independent variable EPS (X4) is 0,000 where this value is smaller than 0.05 (0,000 < 0.05). Then it can be concluded that Ho was rejected and H1 accepted. Thus it can be interpreted that (X4) EPS partially influences market capitalization.

### 3. Test results F

It can be seen in table 3 that the significance value is 0,000 where this value is less than 0.05 (0,000 <0.05). Thus, the variables of intellectual capital disclosure, return on assets (ROA), return on equity (ROE) and earnings per share (EPS) simultaneously or jointly affect the Market Capitalization.

Table 1. Descriptive statistics test results Std. Dev N Min Max Mean **ICD** 60 8,52 9439 99827 .66 **ROA** 60 .00 .10 .0355 ,02100 **ROE** ,03 ,39 ,1820 ,07862 60 **EPS** 60 12,00 1072,00 353,7333 294,67632 **MCAP** 60 27,76 33,63 31,2269 1,68020 Valid N 60 (listwise)

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Table 4.	Statistical	i test i co	erncientsa

Model		Unstanda Coefficie		Standar dized d Coeffici ents		_
	_	В	Std. Error	Beta	- Т	Sig.
1	(Const ant)	29,878	,351	-	85,025	,000
	ICD	,389	,121	,231	3,226	,002
	ROA	-38,546	5,871	-,482	-6,566	,000
	ROE	6,473	1,957	,303	3,308	,002
	EPS	,003	,001	,580	6,278	,000

a. Dependent Variable: MCAP

H0	Keterangan	Nilai	Hasil
		Sign.	

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H 1	Intellectual capital	0,002	Diterima
	disclosure (ICD)	< 0,05	
	berpengaruh terhadap		
	Market Capitalization		
H 2	Return On Asset (ROA)	0,000	Diterima
	berpengaruh terhadap	< 0,05	
	Market Capitalization		
H 3	Return On Equity (ROE)	0,002	Diterima
	berpengaruh terhadap	< 0,05	
	Market Capitalization		
H 4	Earning per Share	0,000	Diterima
	(EPS) berpengaruh	< 0,05	
	terhadap <i>Market</i>		
	Capitalization		
H5	Intellectual capital		
	disclosure (ICD), Return		
	On Asset (ROA),	>000,000	Diterima
	Return On Equity (ROE)	0,05	
	Earning per Share		
	(EPS) secara bersama		
	sama berpengaruh		
	terhadap <i>Market</i>		
	Capitalization		

### IV. Conclusion

Intellectual Capital Disclosure has an effect on Market capitalization. Thus, companies must be able to provide intellectual capital information in financial statements that are disclosed in order to increase the market value of the company and increase investor confidence to be interested in investing. Return on Assets Affect Market capitalization. Return on Equity Aff Market capitalization. Earning per share has an effect on Market capitalization. Thus the company's financial performance has an effect on market capitalization.

From the conclusions above, it is expected that companies should disclose intellectual capital information better so that all information needed by stakeholders is conveyed without information asymmetry. And improve the company's financial performance because it is important for investors to assess how well the company. And for further researchers, it is expected that adding more variables and research objects to produce more new knowledge so that it can facilitate the information users to get accurate information.

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