

## **THE EFFECT OF COMPANY SIZE, SYSTEMATIC RISK AND INDEPENDENT COMMISSIONERS ON DISCLOSURE OF INTELLECTUAL CAPITAL**

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### **ABSTRACT**

*The purpose this study is to determine the effect of company size, systematic risk and independent commissioners on intellectual capital disclosure in banking companies listed on the Indonesia Stock Exchange. The dependent variable is disclosure of intellectual capital, while the independent variable is company size, systematic risk and independent commissioners. This riset was conducted on banking companie listd on the Indonesia Stock Exchange (IDX) by accesing secondary data on annual reports for the 2015- 2018 period. The results of the sample selection were 35 banking companies. The sample method used in this study is to use no-probability sample method with the sample technique chosen is purposive sample. The analysis used in this research is panel data regression analysis. The partial evaluation hypothesis testing results show that firm size and systematic risk have a significant positif effect on intellectual capital disclosure, while independent commissioners do not have a significant negatif effect on intellectual capital disclosure*

*Keywords: Company Size, Systematic Risk, Independent Commissioner , Intellectual Capital Disclosure*

### **1. INTRODUCTION**

Public companies are required to make annual reports that have been audited by an independent public accounting office as very important information for investors on the basis of consideration of investment decisions. In the current era of globalization, business people realize that business competition lies no only in ownership of

tangibility assets, but rather in creation, information syste, organizational management, and organizational resources they own (Marcelia and Purnomo 2016) .

In Indonesia, intellectual capital developed after emergence of “Financial Accounting Standard Statement (PSAK) No. 19 (revision 2010) “concerning intangible asse, intellectual capital also a process of

providing true information that concerns about the presentation at the company's annual report". One who fall into the category of knowledge-based industry (knowledge based industry) is the industry of banking.

The disclosure of intellectual capital featured in news sites online in December 2012 about PT. Bank Panin, Tbk was demanded to pay severance pay to two employees of Bank Panin who were laid off. The same case also happened to Bank Rakyat Indonesia (Persero) Tbk in March 2013, which was demanded to settle its obligations to retirees, namely severance pay, tenure awards, and compensation money. This case indicates that there is a lack of comprehensive disclosure of information regarding company activities and operations.

Company size is one the factors that affect intellectual capital disclosure. This is indicated by the size of a company on total assets, sales, average sales and average assets. The bigger the company size, higher level of intellectual capital disclosure in annual report, and the bigger the company, the greater the funds for the management and maintenance of intellectual capital so that it continues to be optimal and the intellectual capital performance is higher, Ashari, PMS, and Putra (2016).

The next factor that affects intellectual capital disclosure is systematic risk that cannot be diversified. Systematic risk has the potential to increase or decrease the company's performance and share price, because systematic risk is uncontrollable. In addition, there are other actors who can influence

intellectual capital disclosure, namely independent commissioners. An independent commissioner is a member of the board of commissioners who is not affiliated with the board of directors, other members of the board of commissioners and controlling shareholder, and is free from business or other relationships that may affect his or her ability to act independently or act solely for the benefit independent commissioner company "(Law No. 40 of 2007 concerning Limited Liability Companies)".

An independent commissioner an independent and neutral party in the company, which is expected to bridge the information asymmetry that occurs between the owner and the manager. "If the supervision has carried out effectively, then the management of the company will be carried out properly, and management will disclose all available information, including information about intellectual capital, White (2007)".

White research (2007) "concluded that an independent commissioner influential the intellectual capital disclosure". This is in line with the basic theory, because the existence of independent commissioners supports the principle of responsibility to disclose intellectual capital in implementing corporate governance, which requires responsibility to stakeholders. Nugroho (2017) "states that independent commissioners have no effect on intellectual capital disclosure because the roles and functions of the independent commissioners are not optimal". Where the existence of independent commissioners who

should support the responsibility to disclose intellectual capital and the implementation of corporate governance, has even caused disruption of functions and duties. It is also possible for a company to have high management ownership so that it will focus more on the interests of the owners rather than optimizing disclosure of intellectual capital.

## **2. LITERATURE REVIEW**

### **2.1 Agency Theory**

Agency theory aims to improve ability individuals (both principals and agents) in evaluating the company environment where a decision must be made (The Belief Revision role), in addition, financial theory also aims to evaluation results decisions that have been taken to facilitate the allocation of results between principals and agents. in accordance with the agreement in the work contract “(The Performance Evaluation role)”. Agency theory asserts that disclosure can reduce agency costs in the relationship between shareholders as providers of funds and management as operational decision makers, Jensen and Meckling (1976). The agency costs arise due to agency conflicts caused by differences in the management function (manager) and the company's ownership and control functions (the principal) which results in moral hazard, Jensen and Meckling (1976).

### **2.2 Signal Theory**

Signaling theory is basically concerned with the decrease in information asymmetry between the two parties, Spence (2002). Signaling theory is also concerned with dealing with problems arising from information asymmetry in social settings. This shows that

information asymmetry can be reduced if those who have the information can send signals to related parties. A signal can be an observable action, or an observable structure, which is used to show the hidden characteristics (or qualities) of the signaler. Signal delivery is usually based on the assumption that it should be profitable for the signaler (for example showing a higher quality of the product compared to its competitors), An (2011).

### **2.3 Intellectual Capital Disclosure**

Intellectual capital referring to the capitals of non-physical or intangible capital (intangible assets) or invisible (invisible) associated with knowledge and human experience and the technology used. There are 3 main elements of intellectual capital according to Sawarjuwono (2003) in Istanti (2009), namely Human Capital (human capital), Structural Capital or Organizational Capital (organizational capital), Relational Capital or Customer Capital (customer capital).

### **2.4 Company Size**

“Company size describes size a company as measured by the total assets owned by the company”, Sujoko and Soebiantoro in Pusanti (2013). Total assets are a relatively more stable measure compared to other company measurements, Muksodah, Oemar, Andini, (2015).

### **2.5 Systematic Risk**

Systematic risk or market risk is a risk that is always there and cannot be eliminated by diversifying because it will affect all operating companies. Systematic risk is related to macro factors that occur outside the operating company. These factors are economic growth, deposit interest rates, inflation rates, foreign

exchange rates, government policies in the economic sector and others.

### **2.6 Independent Commissioner**

Independent commissioner is a member board of commissioners who is not affiliation with the board of directors, other members of the board of commissioners and control shareholder, and free business relationships and other relationships that may affect his ability to act independently, the independent board of commissioners is to ensure that the company's trials run well participate in decision making and ensure that management decisions are in line with the interests of the owners, so the presence of independent commissioners can affect the level of broader skill disclosure, Hanniffa (2005).

### **2.7 Research Hypothesis**

Theoretical basis that analyzes effect of company size, systematic risk and independent commissioners on intellectual capital disclosure, the hypothesis can be explained as follows:

#### **2.7.1 The Effect of Company Size on Intellectual Capital Disclosure**

Company size describes size of a company as measured by knowing the total assets owned by the company. And the higher the demand for information disclosure compared to smaller companies.

H<sub>1</sub> : Company size has a positive effect on Intellectual Capital Disclosure.

#### **2.7.2 The Effect of Systematic Risk on Intellectual Capital Disclosure**

By informing the market and shareholders of intellectual capital in the company, management hopes to reduce the risk associated with the company by reducing uncertainty

about “ hidden value” and its potential.

H<sub>2</sub> : Systematic risk has a positive effect on Intellectual Capital Disclosure.

#### **2.7.3 Effect of Independent Commissioners on Intellectual Capital Disclosure**

If the supervision has been carried out effectively, then the management of the company will be carried out properly, and management will disclose all available information, including information about intellectual capital, White (2007).

H<sub>3</sub> : Independent Commissioner has a positive effect on Intellectual Capital Disclosure.

## **3. RESEARCH METHOD**

### **3.1 Data Collection Techniques**

This research uses a quantitative approach. According to Sugiono (2017: 8) “quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to research on certain sample populations, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses”.

### **3.2 Operational Definitions of Variables**

The dependent variable is intellectual capital disclosure and the independent variables are company size, systematic risk and independent commissioners.

### **3.3 Sample Collection Techniques**

The population taken was all banking companies for the 2015-2018 period with 35 companies, the criteria were:

1. Banking sub-sector companies listed on the ISE during the 2015-2018 period.

2. During 2015-2018 period, company published complete financial reports in rupiah currency.

3. Have data regarding company size, systematic risk, and an independent board of commissioners during the 2015-2018 observation period.

### 3.4 Data Analysis Techniques

Method in this study using a panel data regression which is a combination of data cross section (data several companies) and data time series (data collected over one year), where the cross section the same measured at different times. "So in other words, panel data is data from several companies (samples) that were observed over a certain period of time", Eksandy (2018: 23).

## 4 RESULT AND DISCUSSION

### 4.1 RESULT

Descriptive analysis use to be able to see an overview of the distribution of the data to be studied (Eksandy, 2018: 66). The data distribution can be seen through the mean, median, max value, min value and standard deviation. Based on the output of Eviews 9.0.

Table 1. Descriptive Statistical Analysis

	ICD	SIZE	BETA	KI
Mean	1.331764	17.52659	0.809493	0.588929
Median	1.361000	17.23800	0.632000	0.600000
Maximum	1.500000	20.98300	13.75100	0.750000
Minimum	1.056000	10.16600	-4.527000	0.400000
Std. Dev.	0.109929	1.824081	2.007808	0.092486
Skewness	0.611132	0.256228	2.004362	0.034319
Kurtosis	2.424528	3.544421	15.28025	1.849749
Jarque-Bera	10.64639	3.260866	973.4342	7.745436
Probability	0.004877	0.195845	0.000000	0.020802
Sum	186.4470	2453.723	113.3290	82.45000
Sum Sq. Dev.	1.679717	462.4910	560.3498	1.188971
Observations	140	140	140	140

Source: processed data, Eviews 9 output

Based on the table above, the sample (N) used 140 data consisting of 35 companies with an observation period of 4 years, namely the 2015-2018 period. Intellectual capital disclosure (ICD) has a minimum value of 1.05600, the maximum value of 1.500000. The average value is 1.331764 and the standard deviation is 0.109929. The results of the average derived from the cumulative index score of intellectual capital disclosures by 48 of 63 score. Company Size has a minimum value of 10.16600, a maximum value of 20.98300 with an average value of 17.52659 and a standard deviation of 1.824081. Systematic Risk (BETA) has a minimum value of -4.527000, a maximum value of 13.75100, an average value of 0.809493 and a standard deviation

of 2.007808 . Independent Commissionr (KI) has a min value of 0.400000, the max value of 0.750000 owned by Bank Victoria International Tbk in 2017 and 2018, the average value of 0.5888929 and a standard deviation of 0.092486.

**Panel Data Regression Estimates**

Model common effects a panel data approach simplest. More about the results of the common effect model approach as follows:

*Table 2. Common Effect Model*

Dependent Variable: ICD Method: Panel Least Squares Date: 09/29/19 Time: 14:17 Sample: 2015 2018 Periods included: 4 Cross-sections included: 35 Total panel (balanced) observations: 140				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.767008	0.101824	7.532683	0.0000
SIZE	0.033613	0.004298	7.820284	0.0000
BETA	0.009981	0.003741	2.668335	0.0085
KI	-0.055105	0.083650	-0.658756	0.5112
R-squared	0.396786	Mean dependent var		1.331764
Adjusted R-squared	0.383480	S.D. dependent var		0.109929
S.E. of regression	0.086315	Akaike info criterion		-2.033480
Sum squared resid	1.013229	Schwarz criterion		-1.949434
Log likelihood	146.3436	Hannan-Quinn criter.		-1.999326
F-statistic	29.81966	Durbin-Watson stat		0.218729
Prob(F-statistic)	0.000000			

Source: processed data, Eviews 9 output

The fixed effects model assumes that the differences between individuals can be accommodated from differences in the intercept. Learn more about the results of the approach Fixed Effects Model as follows:

*Table 3.Fixed Effect Model*

Dependent Variable: ICD Method: Panel Least Squares Date: 09/29/19 Time: 14:31 Sample: 2015 2018 Periods included: 4 Cross-sections included: 35 Total panel (balanced) observations: 140				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.160978	0.084500	13.73940	0.0000
SIZE	0.011071	0.004632	2.390080	0.0187
BETA	0.008636	0.001419	6.086395	0.0000
KI	-0.051339	0.058736	0.874070	0.3841
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.951299	Mean dependent var		1.331764
Adjusted R-squared	0.933633	S.D. dependent var		0.109929
S.E. of regression	0.028320	Akaike info criterion		-4.064336
Sum squared resid	0.081804	Schwarz criterion		-3.265890
Log likelihood	322.5035	Hannan-Quinn criter.		-3.739872
F-statistic	53.84887	Durbin-Watson stat		1.733416
Prob(F)	0.000000			

Source: processed data, Eviews 9 output

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<http://openjournal.unpam.ac.id/index.php/EAJ>

In this model, panel data estimates will be selected where the residuals may be interrelated over time and between individuals. Learn more about the results of the approach Random Effect s Model as follows:

*Tabel 4. Random Effect Model*

Redundant Fixed Effects Tests			
Equation: EQ01			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	34.158122	(34,102)	0.0000
Cross-section Chi-square	352.319811	34	0.0000

Source: processed data, Eviews 9 output

**Model Selection Model Estimation**

The Chow test is a test to determine the Fixed Effect or Common Effect model that is more appropriate to use in estimating panel data.

Table 5. Uji Chow

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	156.9696	0.900271	157.8699
	(0.0000)	(0.3427)	(0.0000)

Source: processed data, Eviews 9 output

Based on Table 4.1.5 above, the cross-section probability value F is 0.0000 <0.05 and the chi-square cross section is 0.0000 <0.05. Therefore, the regression model is better to use the Fixed Effect Model than the Common Effect Model.

Table 6. Uji Hausman

Dependent Variable: ICD				
Method: Panel EGLS (Cross-section random effects)				
Date: 09/29/19 Time: 14:41				
Sample: 2015 2018				
Periods included: 4				
Cross-sections included: 35				
Total panel (balanced) observations: 140				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.069828	0.078002	13.71536	0.0000
SIZE	0.016946	0.004034	4.201048	0.0000
BETA	0.008612	0.001412	6.098774	0.0000
KI	-0.071391	0.055417	-1.288254	0.1998
	Effects Specification			
			S.D.	Rho
Cross-section random			0.084229	0.8984
Idiosyncratic random			0.028320	0.1016
	Weighted Statistics			
R-squared	0.307561	Mean dependent var	0.220786	
Adjusted R-squared	0.292287	S.D. dependent var	0.034155	
S.E. of regression	0.028733	Sum squared resid	0.112282	
F-statistic	20.13578	Durbin-Watson stat	1.330189	
Prob(F-statistic)	0.000000			

Source: processed data, Eviews 9 output

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The probability value of random cross-section is  $0.0718 > 0.05$ . Therefore, it is better if the regression model uses the Random Effect Model than the Fixed Effects Model.

The cross-section probability value of Breusch-pagan is  $0.0000 < 0.05$ . Therefore, it is better if the regression model uses the Random Effect Model than the Common Effects Model.

The Adjusted R- Squared value of 0.292287 shows that 29.22% of the independent variables in this study can explain Intellectual Capital Disclosure, while the remaining 70.78% is explained by other factors not examined in this study. This means that the level of the relationship between the variables of Company Size, Systematic Risk and Independent Commissioners on Intellectual Capital Disclosure is low / weak.

Based on the results shown in the table above shows that the value of the F-statistic of 20.13578, while the value of the F-table with a probability level of 0.05,  $df (k-1) = 3$  and  $df 2 (nk) = 136$  of 2.67. Thus the F- statistic value is  $20.13578 > 2.61$  F-table value and Prob (F- statistic) value is  $0.000000 < 0.05$ , so it can be said that Company Size, Systematic Risk and Independent Commissioner jointly influence Intellectual Capital Disclosure.

The results of the t table are calculated with the level of  $\alpha = 5\%$ ,  $df (nk) = 136$ , then the t table value is 1.97756.

## 5. CONCLUSION

1. Based on the results of the t-statistic test obtained with a positive value of  $(4.201048) > t$  Table (1.97756) and the value of Prob. (0.0000)  $< 0.05$  indicates that firm size (X 1) has a significant positive effect on Intellectual Capital Disclosure (Y), meaning that if firm size increases, intellectual capital disclosure will increase.

2. Based on the results of the t-statistic test obtained with a positive value of  $(6.098774) > t$  Table (1.97756) and the Prob value . (0.0000)  $< 0.05$  indicates that Systematic Risk (X 2) has a significant positive effect on Intellectual Capital Disclosure (Y), which means that if Systematic Risk increases, Intellectual Capital Disclosure will increase.

3. Based on the results of the t-statistic test obtained with a negative value of  $(-1.288254) < t$  Table (1.97756) and the Prob value . (0.1998)  $> 0.05$  indicates that the Independent Commissioner (X 3) does not have a significant negative effect on Intellectual Capital Disclosure (Y), which means that the rise and fall of Independent Commissioners does not have a significant effect on the rise and fall of Intellectual Capital Disclosure. This indicates that the number of independent commissioners does not affect the company in disclosing its intellectual capital.



Received: July 1, 2020; Revised: Aug 17, 2020; Accepted: Sept 27, 2020; Published : Sept 30, 2020

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