

Do Disclosure of Enterprise Risk Management and Intellectual Capital beneficial for Banking Companies?



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ABSTRACT: This research aims to analyze and describe the relationship between *Enterprise Risk Management* Disclosure and *Intellectual Capital* to Company Value in the Banking sector. The population is banking sector companies listed on IDX during the period 2017 to 2021 consisting of 47 companies. The sampling technique used in this study was purposive sampling. 39 companies were selected in this study with 195 units of analysis obtained. Multiple regression analysis is used to analyze the data. The results showed that *Enterprise Risk Management* has a significant positive impact on Company Value. Meanwhile, *Intellectual Capital* has a significant negative impact on the Value of the Company. Meanwhile, *Enterprise Risk Management* and *Intellectual Capital* together have a significant impact on Company Value.

KEYWORD: *Enterprise Risk Management; Intellectual Capital; Company Values*

I. INTRODUCTION

Business development in the era of globalization due to the modernization of information technology has a great impact on the business world. This can be seen from the development of digital technology, they can easily get information. Competition is getting tougher, companies are trying to continue to innovate by providing the latest information in the business world about products, technology, company activities and voluntary disclosures so that investors know the picture of the company's value.

There are several factors that can impact the value of the company, namely *enterprise risk management disclosure*, *intellectual capital disclosure* and management structure divided into an independent board of commissioners, a board of directors and an audit committee. According to (Hoyt and Liebenberg in Ardianto & Rivandi, 2018), "*Enterprise risk management disclosure* is a disclosure in the form of risk management information carried out by the company and reveals the effect on the future value of the company". The Company strives to minimize the risk of any business decisions taken. *Enterprise risk management* in a company has an important role to maintain company stability. Intellectual capital is an intangible asset that has high value and is a vital asset for companies, because intellectual capital disclosure can improve company performance and create company value. The increase in Intellectual capital disclosure published in the annual report provides credible and profitable information for investors in making decisions. (Ardianto & Rivandi, 2018)

Republika (2021) published about one of the business risk phenomena in banking institutions, in its editorial on September 24, 2021, Deputy Commissioner of Banking Supervision III Slamet Edy Purnnomo, said that the Financial Services Authority revealed that the losses suffered by the banking world suffered losses due to fraud which reached Rp. 4.62 T which came from the internal environment and external environment of the banking industry. He detailed that the number of *causes of fraud* in the internal environment was 1,005 incidents in the first quarter of 2020 and fell to 796 incidents in the second quarter of 2020. Meanwhile, the *causes of fraud* from the external banking environment increased to 8,218 incidents in the second quarter of 2020 compared to 6,444 incidents in the first quarter of 2020. In addition, (Faizah & Pujiono, 2022) found that management's strategy in managing risks and opportunities is less effective and efficient so that it does not have too much influence on the rise or fall of company value. As reported in detiksumut (2022) as an example of the company's internal risks, the case of theft of customer money at Bank Riau Kepri worth Rp. 5 billion was carried out by the bank itself with the initials (RP). (RP) shined money from 71 customers taken in stages over a period of 2 years or in the period from 2020 to 2022.

Several previous researchers have examined the impact of *disclosure of enterprise risk management* and *intellectual capital* on the value of companies with several different sectors and measuring instruments. Previous studies produced inconsistent results so that a research gap was found. The positive and significant relationship from *enterprise risk management* and company value has been proven by (Suardi & Werastuti, 2019), (Haryono, 2022). On the other hand, (Rizka & Arifin, 2015), (Faizah & Pujiono, 2022)(Fajriah & Ghazali, 2022)(Suardi & Werastuti, 2019) found that *enterprise risk management* does not show an impact on company value. (Wulandari, 2021), (Pramita et al., 2021)(Wulandari, 2021) tested the impact of intellectual capital on company

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value and obtained the result that *intellectual capital* affects company value. Meanwhile, another study conducted by (Erfani et al., 2022), (Herdani & Kurniawati, 2022) which also tested the influence from *intellectual capital* and company value got different results from previous studies, namely getting results that had a significant negative effect.

The problem in this study is in the form of a phenomenon that occurred at the Riau Kepri bank and *a research gap* in previous research that discussed the Company's Value received inconsistent results. This research aims to analyze and describe the relationship from *Enterprise Risk Management* and *Intellectual Capital* Disclosures to Company Value in the Banking sector.

From several differences in the results of previous research this research is a modification of the research (Devi et al., 2017) By making banking companies as a research sample that tests the relationship between *Enterprise Risk Management* and *Intellectual Capital* with company value and also the difference in *intellectual capital* measuring instruments that use *The Pulic Moder (VAICTM Method)*. The VAICTM method from Pulic (1998) is designed to provide information about the value creation efficiency of tangible and intangible assets of a company. This model starts with the company's ability to create value added (VA). VA is calculated as the difference between output and input. By developing research (Devi et al., 2017) this research uses the Pulic model (VAICTM) to compile banking rankings in Indonesia.

II. THEORITICAL RAVIEW

A. Signaling Theory & Resource Based Theory

Disclosure of *Enterprise Risk Management* and *Intellectual Capital* can be explained using *Signaling Theory* and *Resource Based Theory*. Spence (1973) suggests that explaining the sender (owner of the information) gives a signal in the form of information that shows the condition of a company that benefits the recipient (investor). Signal theory emphasizes that information from the company is important for investment decisions of parties outside the company. In-line management seeks to disclose personal information that the company finds particularly attractive to investors and shareholders, especially if the information is good news. Information containing good news can have an impact on the market reaction at the time the information is received by the market. The positive market reaction to good news will drive the company's value higher (Devi et al., 2017). If the disclosure of *enterprise risk management* in the full report then the market reaction will react positively. The initial thought regarding the view that the company is a collection of various resources pioneered by Penrose (1959), which reads The productive services offered are derived from corporate resources, which are heterogeneous rather than homogeneous. These resources give each company its own distinct personality. Resource-based theory states that by analyzing and interpreting company resources, it can be used to understand how a company will achieve its competitive advantage, which believes that a company will achieve excellence if it has superior resources (Nur Muarifah, 2018). If the company can maximize its resources, then the company will have an added value for the company, so as to improve intellectual capital performance which will provide its own characteristics to the company.

B. Enterprise Risk Management

Good company risk management is able to provide more value so that investors are more confident to entrust their capital to companies that are able to manage risk properly and correctly. In line with *Signaling Theory*, the disclosure of ERM by the company also gives a positive signal and becomes good news information that has an impact on the market reaction. Through ERM information investors can assess the company's prospects in achieving the expected goals. So it can be assumed that if the disclosure of *enterprise risk management* increases in value, the value of the company also increases.

(Solikhah & Hariyati, 2018) and (Devi et al., 2017) conducted a different study and got the same result that *enterprise risk management* was proxied using *Integrating with Strategy and Performance* issued by COSO in 2017 with five basic components, namely *governance and culture, strategy and objective setting, performance, review and revision, and information, communication, and reporting*.

H₁: Disclosure of *Enterprise Risk Management* positively affects Company Value

C. Intellectual Capital

The importance of managing *intellectual capital* owned by the company must be realized by every company. If the company can maximize its resources, then the company will have an added value for the company, so as to improve *intellectual capital* performance which will provide its own characteristics to the company. In line with *Resource Based Theory*, *intellectual capital* meets the criteria as a unique resource that can lead companies to achieve competitive advantage so as to create value added for the company. Then can be assumed that if the value of *intellectual capital* increases, the value of the company increases.

(Wulandari, 2021) and (Sulistiwati & Wahidahwati, 2022) conducted research differently and got the same results that intellectual capital that is proxied using VAIC has a significant impacat on the value of the company that is proxied with Q. According to him, companies that manage intellectual capital resources optimally will be able to create greater value added and competitive advantages that will lead to an increase in company value. with

H₂: *Intellectual Capital* positively affects Company Value

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III. METHODS

This type of research based on research data collection techniques is quantitative research. The population used is banking sector companies listed on the IDX periode 2017-2021 as many as 47 companies. Purposive sampling techniques were used in selecting 39 sample companies. The research period is 5 years.

The dependent variable used in the research is Company Value, The author uses Tobin's Q to proxy the value of the company. Latif et al. (2017) in (Puspita & Jasman, 2022). defines that the value of the company (Tobin's Q) as market capitalization plus total debt divided by assets, so the value of the company is formulated as follows. Measuring instruments used to determine Company Value:

$$Q = \frac{\text{MVE (Jumlah Saham yang Beredar x Closing Price) + Total Hutang}}{\text{Total Aset}}$$

Based on calculations, the Q ratio can estimate the market value of a company that is *undervalued* or *overvalued*. If the Q ratio is high ($Q > 1$) then the growth potential of a company is high and also the management performs well against the company's assets.

The first independent variable, Enterprise Risk Management, is measured through the *Enterprise Risk Management Disclosure Index (ERMDI)* issued by COSO with 108 ERM disclosure items covering eight dimensions. The eight dimensions are: 1) identification of events; 2) goal setting; 3) the internal environment; 4) risk assessment; 5) risk response; 6) supervisory activities; 7) information and communication; and 8) monitoring. ERMDI measurement is done by scoring 0 if an item is not spelled out, while score 1 if the item is spelled out based on ERMDI calculations. The author will obtain the number of scores from each company based on the scoring of all items (Solikhah & Hariyati, 2018). Measuring instruments used:

$$ERMDI = \frac{\text{Total Skor yang Diungkapkan}}{\text{Jumlah Item yang Seharusnya Diungkapkan}}$$

The second independent variable, *Intellectual Capital*, is measured through Modified VAIC which is an IC performance measurement model based on the Pulic model (VAICTM) process carried out in three stages:

Phase I: calculating VAICTM begins with the calculation of VA as a starting point, namely:

$$VA = OP + EC + D + A$$

Description: VA = Value Added; OP = Operating Profit; EC = Employee Cost; D = Depreciations; A = Amortizations

Phase 2: VAICTM is the result of the summation of intellectual capital efficiency (ICE) and capital employed efficiency (CEE), while ICE is HCE (human capital efficiency) plus SCE (structural capital efficiency). The formula for calculating it is:

$$HCE = \frac{VA}{HC}$$

Description: HCE = Human Capital Efficiency; VA = Value Added; HC = Human Capital: total salaries and wages; employee load

$$SCE = \frac{SC}{VA}$$

Description: SCE = Structural Capital Efficiency; SC = Structural Capital; VA – HC; VA = Value Added

Stage 3: Pulic (2004) argues that in order to have a broad picture of the efficiency of all resources, it is important to take financial capital and physical capital (capital employed) as one of the considerations. The efficiency of the capital used can be obtained in the following ways:

$$CEE = \frac{VA}{CE}$$

Description: CEE = Capital Employee Efficiency; VA = Value Added; CE = Capital Employee; book value of total assets

Thus, the complete formula of the VAIC vari is as follows:

$$VAIC = \frac{VA}{HC} + \frac{SC}{VA} + \frac{VA}{CE}$$

Based on the results of MVAIC calculations, a ranking of banking IC performance in Indonesia is further made with the following criteria according to (Ihyaul Ulum, 2017): 1) Top performers - M-VAIC score above 3.50; 2) Good performers – M-VAIC score between 2.5 and 3.49; 3) Common performers – M-VAIC score between 1.5 and 2.49; 4) Bad performers - M-VAIC score below 1.5.

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Table 1: Sample Selection Criteria

No	Criterion	Elimination	Total
1	Companies categorized as banking sector listed on the Indonesia Stock Exchange in 2017-2021.	0	47
2	Companies listed on the IDX since 2017	6	41
3	Publish consecutive Annual Reports for 2017-2021	1	40
4	Financial statements denominated in Rupiah (Rp)	1	39

Source: Secondary data processed, 2022

In this research, multiple regression analysis was used, the regression model was used to determine the influence of independent variables, namely *Enterprise Risk Management* and *Intellectual Capital* Disclosures on Company Value as dependent variables, while the equations used were: $NP = a + b_1ERM_1 + b_2IC_2 + \epsilon$. Description: NP: Company Value; a: Constant; b_1ERM_1 : *Enterprise Risk Management*; b_2IC_2 :*Intellectual Capital*; ϵ : Error

IV. RESULTS AND DISCUSSION

Descriptive statistics reflect the distribution of data in the form of mean, median, maximum value, minimum value and standard deviation. The Probability value in the normality test shows a number of 0.051 which is above the significance level of 0.05 or the conclusion that the residual data is normally distributed. The correlation value of each variable in the multicollinearity test is > 0.90 which indicates the result that the regression model is free of multicollinearity. The heteroskedasticity test shows the probability value of each variable above 0.05, so it can be said that the data is free from the symptoms of heteroskedasticity. Based on the Model Selection Test through the Chow Test, Hausman Test and LM Test, the FEM” model was selected as a table for drawing hypothesis test conclusions.

The value of R^2 indicates a value of 0.21 which means that all independent variables together affect the dependent variable by 21% and the remaining 79% is influenced by variables outside the study.

Table 2: Statistical Test with Panel List Squares Method

Dependent Variable: NP				
Method: Panel Least Squares				
Date: 01/11/23 Time: 13:06				
Sample: 2017 2021				
Periods included: 5				
Cross-sections included: 35				
Total panel (unbalanced) observations: 168				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	-.447640.4	213436.0	-2.097305	0.0379
ERM	5.878267	2.207298	2.663106	0.0087
IC	-0.231312	0.084064	-2.751614	0.0068
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.381098	Mean dependent var		120172.3
Adjusted R-squared	0.211018	S.D. dependent var		35572.04
S.E. of regression	31596.74	Akaike info criterion		23.75120
Sum squared resid	1.31E+11	Schwarz criterion		24.43922
Log likelihood	-1958.101	Hannan-Quinn criter.		24.03044
F-statistics	2.240700	Durbin-Watson stat		2.400845
Prob(F-statistic)	0.000510			

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Equation 1: the impact of enterprise risk management on the value of the company, in the table 2, the test results according to the FEM model show that t-statistic has a value of 2.6631 and a prob of 0.0087. From these figures, then *Enterprise Risk Management* has a positive and significant impact on Company Value because the t-statistical value has a positive value and the probability value is >0.05 . Thus H_1 which reads *Enterprise Risk Management* has a positive impact on the Value of the Company received.

Enterprise Risk Management has a positive and significant impact on Company Value, this shows that the more complete the risk management disclosures submitted by the company in its annual report, the higher the company's value. In line with *Signaling Theory*, the disclosure of ERM by the company also gives a positive signal and becomes good *news* information that has an impact on the market reaction. Through ERM information investors can assess the company's prospects in achieving the expected goals. Then that if the *disclosure of Enterprise Risk Management* increases in value, the value of the company also increases. The results of this research support the results of research conducted by (Suardi & Werastuti, 2019) and (Fajriah & Ghozali, 2022), *Enterprise Risk Management* has a positive correlation with Company Value.

Equation 2: The impact of Intellectual Capital on Company Value, in the table 2, the test results according to the FEM model show that t-statistic has a value of -2.7516 and a prob of 0.0086. From these figures, then *Intellectual Capital* has a negative and significant impact on the Value of the Company because the t-statistical value has a negative value and the prob value is less than 0.05. Thus H_0 which reads *Intellectual Capital* has no positive effect on the value of the Company being accepted.

Intellectual Capital has a negative and significant impact on Company Value, this shows that the higher the value of *Intellectual Capital* of a company, the lower the value of a company. This result is irrelevant to the theory of *Resource Based Theory* which states that by analyzing and interpreting resources the company can understand how a company will achieve its competitive advantage, which believes that the company will achieve excellence if it has superior resources. This is because investors who ignore intellectual capital when evaluating or measuring a company's performance consider other factors, such as a company's share price, when measuring the value of its company. Prevents investors from seeing the intellectual capital of the company during decision making. The results of this study support the results of research conducted by (Erfani et al., 2022), *Intellectual Capital* has a negative relationship with company value.

CONCLUSION

The results of hypothesis testing show that *Enterprise Risk Management* has a positive relationship with Company Value, because through ERM information investors can assess the company's prospects in achieving the expected goals. Meanwhile, *Intellectual Capital* has a negative relationship with Company Value, because there are still many companies that do not expose and have not maximized the value of *intellectual capital*.

SUGGESTION

The suggestion for further research is to use different periods, different research indicators and also in different sectors.

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