The Effect of Company Size, Systematic Risk, and Independent Commissioner on Intellectual Capital Disclosure

Intan Octaviani*
Muhammadiyah University of Tangerang
intanoctaviani100@gmail.com

Kartika Djati
Muhammadiyah University of Tangerang
kartikadjati@gmail.com

Abstract. This research aims to determine the effect of Company Size, Systematic Risk, and Independent Commissioner on the Disclosure of Intellectual Capital. The population in this research was banking companies listed in Indonesia Stock Exchange during the period of 2015 to 2018 for 4 years of research. The total samples tested were 35 companies selected by purposive sampling technique and acquired 140 units of analysis, which was the object of observation. It used secondary data obtained from the Indonesia Stock Exchange. The data were analyzed using data panel regression with Eviews 9.0 program. The result showed that company size and systematic risk had a positive effect on the disclosure of intellectual capital. In contrast, independent commissioners had no effect on the disclosure of intellectual capital. A suggestion for future research is the use of more sampling so that the results can be generalized. Other methods of data collection, such as interviews or questionnaires to seek information regarding the disclosure of the company's intellectual capital, can also be used.

Keywords: intellectual capital disclosure, company size, systematic risk, independent commissioner

INTRODUCTION

According to PSAK No. 19, intangible assets are non-monetary assets that can be identified and do not have a physical form and are owned for use in producing or delivering goods or services, leased to other parties, or for administrative purposes. PSAK No. 19 proves that intellectual capital in Indonesia has received attention. However, in practice, companies in Indonesia have not given enough attention to the three components of intellectual capital: human capital, structural capital, and relational capital [1],[2].

Disclosure of intellectual capital is the process of providing information related to intellectual capital presentation in an annual company report, which is included in the complaint section of the annual report. Intellectual capital disclosure plays an essential role in corporate strategy information. The success of the company's development and sustainability depends on how the company utilizes its intellectual capital effectively and efficiently to produce more value for the company. Disclosure of intellectual capital has become a new form of communication that controls the "contract" between management and workers. This allows managers to make strategies to meet stakeholders' expectations, such as investors, and to convince stakeholders of the benefits of company policy [3],[4].

Banking is one of the categories in the knowledge-based industry. This industry utilizes the innovations it creates, thus providing its own value for products and services produced for consumers. The relationship between intellectual capital and the banking sector is that banking is a business sector that is "intellectually intensive," and includes the service sector (customer service) highly dependent on intellect or reason or human intelligence. One case related to the importance of intellectual capital disclosure was reviewed on an online news site in December 2012 regarding Bank Panin, Tbk, PT, a company engaged in the banking industry. Bank Panin, Tbk, PT, is demanded to pay severance pay to two employees of Bank Panin who were laid off. Information about the case can be voluntarily disclosed in the company's annual report as supporting information to meet stakeholders’ information needs. Companies can explain the amount of expenditure or costs spent on employees, such as education and training costs, pensions, employee competency development, and other costs associated with improving employee quality [5],[6].

One of the factors influencing intellectual capital disclosure is company size. The size of the company describes the size of a company indicated by total assets, total sales, average total sales, and average total assets. The greater the size of the company, the higher the level of disclosure of intellectual capital in the annual report, and the larger the company, the higher the funds for the management and maintenance of intellectual capital so that it continues to be optimal; thus the performance of intellectual capital is higher [7].

The next factor affecting intellectual capital disclosure is systematic risk. The systematic risk or market risk is the risk associated with changes that occur in the market as a whole. In other words, systematic risk is a risk that cannot be diversified. Systematic risk can increase or decrease company
performance and stock prices because the risk of charisma is uncontrollable. Systematic risk describes changes that are higher or lower than individual stock returns to market returns, and are measured using the stock Beta indicator \((\beta)\). Mkumbuzi (2016) examined the relationship between Beta \((\beta)\) with a positive effect. High Beta can motivate management to increase intellectual capital disclosure to reduce systematic risk exposure. By informing the market and intellectual capital shareholders in the company, management hopes to reduce the company’s risks and reduce uncertainty about its "hidden value" and potential. [2],[8],[9].

The next factor affecting intellectual capital disclosure is an independent commissioner. Independent commissioners are non-commissioner members who have financial relations, management, share ownership, or controlling shareholder or other influential relationship. Independent commissioners as an independent and neutral party in the company are expected to bridge the information asymmetry between the owner and the manager by encouraging other members of the board of commissioners to carry out supervisory duties better. If supervision has been carried out effectively, the management of the company will be carried out well, and management will disclose all available information, including information about intellectual capital. [10],[11].

H1: Company size has a positive effect on Intellectual capital disclosure
Agency theory states that the level of voluntary disclosure is a way to find out the relationship between shareholders (principal) with company management (agent) [12].

H2: Systematic Risk has a positive effect on Intellectual capital disclosure
High Beta can motivate management to increase intellectual capital disclosure to reduce systematic risk exposure. By informing the market and intellectual capital shareholders in the company, management hopes to reduce the risks associated with the company and reduce uncertainty about its "hidden value" and potential [8].

H3: Independent Commissioners has no effect on Intellectual capital disclosure
Independent commissioners have no effect on intellectual capital disclosure because the roles and functions of independent commissioners are not optimal. The existence of an independent commissioner is supposed to support the responsibility to disclose intellectual capital, and the application of corporate governance, instead, disrupts functions and tasks [13].

**METHOD**

This research was quantitative. The data in this study came from the annual report of banking companies listed on the Indonesia Stock Exchange (IDX) in 2015-2018. The population in this study was banking companies listed on the Indonesia Stock Exchange (IDX) in 2015-2018. The sampling technique in this research used a purposive sampling method. The variables in this study consisted of dependent and independent variables. The dependent variable in this research

| Name of Variables                  | Definition                                                                 | Measurement                                                                 |
|-----------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Intellectual Capital Disclosure   | The disclosure of intellectual capital was calculated using disclosure index consisting of 78 items [14] | ICD = Exceed of disclosure done by the company / Exceed of disclosure done by the company |
| Company Size                      | Company size is valued at the company’s size collected by knowing the total assets needed by the company, [11] | Size = Ln (Total assets)                                                    |
| Systematics Risk                  | Systematic risk describes changes that are higher or lower than individual stock returns to market returns, and are measured using the stock Beta indicator. [5] | Return of Individual Stock = \(\frac{PT - PT_{t-1}}{PT_{t-1}}\) Stock Return |
| Independent Commissioners         | Independent commissioners are non-commissioner members who have financial relations, management, share ownership, and controlling shareholder or other influential relationship. [11] | Independent Commissioner = \(\frac{Number of Independent Commissioner}{Number of Commissioner}\) |

Table 1. Operational Definition of the Variables
was intellectual capital disclosure. The independent variables in this study included the company size, systematic risk, and independent commissioner.

Data were collected using analysis, a method of research data collection through observation technique, and analysis of the contents or messages of a document. The purpose of content analysis was to identify the characteristics or specific information in a document to produce an objective and systematic description. The analysis methods used were descriptive statistics and inferential analysis. Descriptive analysis was used to know the general description of research data related to research variables. The inferential analysis was to test the research hypothesis using panel regression with the fulfillment of the classical assumption test. [15].

RESULT & DISCUSSION

Based on the result of descriptive statistical analysis, it was found that intellectual capital disclosure was still low at 29.22%. The result of the classical assumption test in this study showed that the model made in this study was free from classical assumptions consisting of normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The regression model used in this study was as follows:

\[ ICD = \alpha + \beta_1 \text{Size} + \beta_2 \text{Beta} + \beta_3 \text{Ind} \]

Notes:
ICD: Intellectual Capital Disclosure
Size: Company Size
Beta: Systematic Risk
Ind: Independent Commissioner

Table 2. The Coefficient of Determination Model Summary

| Model | R-squared | Adjusted R-squared |
|-------|-----------|--------------------|
| 1     | 0.307561  | 0.292287           |

The coefficient of determination (Adjusted \(R^2\)) value in Table 2 was 0.292287. It showed that the capability of three independent variables company size, systematic risk, and independent commissioners was able to explain the variation in intellectual capital disclosure by 29.2% while the rest was equal to 70.8% (100% - 29.2%) explained by other variables outside the model.

Table 3. The Coefficient of Determination Model Summary

| Variable | Coefficient | Std. Error | t-Statistic | P-value |
|----------|-------------|------------|-------------|---------|
| ICD      | 1.069282    | 0.078602   | 13.21356    | 0.0000  |
| SIZE     | 0.016946    | 0.006343   | 2.68168     | 0.0000  |
| BETA     | 0.008512    | 0.001412   | 5.93874     | 0.0000  |
| IND      | -0.071391   | 0.055417   | 1.288258    | 0.1998  |

Based on Table 3, it was obtained the equation as follows:

\[ ICD = 1.069282 + 0.016946 \times \text{SIZE} - 0.071391 \times \text{IND} \]

The result of panel regression analysis showed that company size has a positive effect on intellectual capital disclosure, so \(H_1\) was accepted. This indicates that the larger the company's size, the higher the demand for information disclosure compared to smaller companies. Larger size companies usually do more activities and business units and have the potential for long-term value creation. So, larger companies are often overseen by stakeholder groups with interest in how management manages intellectual capital such as workers, customers, and workers' organizations. This is also following the theory agency that explains that agency costs must be borne by large companies, far greater than smaller companies. To reduce these costs, companies need to disclose more information, including voluntary information such as intellectual capital, so that that interested parties will know more about the company's actual activities, potential, and performance. This reduces information asymmetry and agency costs so that larger companies will be encouraged to conduct intellectual capital disclosure more broadly.

Systematic Risk (Beta) has a positive effect on intellectual capital disclosure, so \(H_2\) was accepted. It means that high Beta can motivate management to increase intellectual capital disclosure to reduce systematic risk exposure. In informing the market and shareholders about intellectual capital in the company, management hopes to reduce the associated risks and reduce uncertainties about “hidden value” and its potential. This is in line with the signal theory, which states that high-quality companies tend to give superior signals to the market. Disclosure of intellectual capital will be an effective medium for companies to deliver superior quality owned by significant intellectual capital to create prosperity in the future. It is often believed that giving signals about the attributes of intellectual capital will result in profits for the company, including improving the company's image, attracting potential investors, reducing capital costs, reducing stock volatility, creating an understanding of products and services, and more importantly, improving relations with stakeholders. [9]

Independent Commissioner has no effect on intellectual capital disclosure, so \(H_3\) was rejected. This indicates that the roles and functions of independent commissioners are not optimal when the independent commissioners of a company are relatively large. The existence of an independent commissioner who is supposed to support responsibility to disclose intellectual capital and the application of good corporate governance,
instead, causes interference with the function and task of providing information. Companies can also have high management ownership to focus more on the interests of the owners and the company's performance compared to optimizing intellectual capital disclosure. Therefore, the independent commissioner only meets the criteria required by good corporate governance.

**CONCLUSION**

Based on the study results, it can be concluded that company size and systematic risk positively influence intellectual capital disclosure. At the same time, independent commissioners have no effect on intellectual capital disclosure. Further research can use different measurements such as scandia navigator or value-based measurement to measure the performance of intellectual capital, debt to asset ratio (DAR) to measure leverage, profitability, managerial ownership, and institutional ownership. Besides, it can add other variables related to intellectual capital disclosure as independent variables.

**REFERENCES**

[1] D. Standar and A. Keuangan, “Exposure Draft PSAK Intangible Asset,” vol. 19, no. 19, 2010.

[2] Y. D. Anna, D. Rari, and D. Rt, “The Influence of Company Characteristics and Corporate Governance on Intellectual Capital Disclosure and Its Impact on Company Value,” *Account. Anal. J.*, vol. 6, no. 2, pp. 233–246, 2018, DOI: 10.17509/ajar.v6i2.11960.

[3] K. I. Sari, B. Gunawan, U. M. Yogyakarta, and J. L. Selatan, “Intellectual Capital on the Financial Performance and Company Growth Intellectual Capital,” pp. 1–14, 2009.

[4] I. Ulum, "Intellectual Capital Disclosure: The Analysis with Four Way Numerical Coding System. Jurnal Akuntansi & Auditing Indonesia, (2001), 0-13," *J. Akunt. Audit. Indonesia.*, vol. 19, no. 1, pp. 39–50, 2015.

[5] E. S. Alghifari, “The effect of Systematic Risk on Company Performance and Its Implications on Company Size. Journal of Management and Business Sciences, 5(1), 1-16,” *J. Ilmu Manaj. Dan Bisnis*, vol. 5, no. 1, pp. 1–16, 2014.

[6] A. A. Dwipayani and I. G. A. M. A. D. Putri, “Factors That effect of Intellectual Capital Disclosure. E-Jurnal Akuntansi Universitas Udayana, 5(11), 3789-3822,” *E-Jurnal Ekon. dan Bisnis Univ. Udayana*, vol. 5, no. 11, pp. 3793–3822, 2016.

[7] P. Swari Ashari and I. Asmara Putra, "the effect of Company Age, Company Size, Profitability, Leverage and Independent Commissioners on Disclosure of Intellectual Capital," *E-Jurnal Akunt.*, vol. 14, no. 3, pp. 1699–1726, 2016.

[8] W. P. Mkumbuzi, “Influence of intellectual capital investment, risk, industry membership and corporate governance mechanisms on the voluntary disclosure of intellectual capital by UK listed companies,” *Asian Soc. Sci.*, vol. 12, no. 1, pp. 42–74, 2016, DOI: 10.5539/ass.v12n1p42.

[9] I. Ulum, R. R. Harviana, S. Zubaidah, and A. W. Jati, “Intellectual capital disclosure and prospective student interest: an Indonesian perspective,” *Cogent Bus. Manag.*, vol. 6, no. 1, 2019, DOI: 10.1080/23311975.2019.1707041.

[10] G. White, A. Lee, and G. Tower, “Drivers of voluntary intellectual capital disclosure in listed biotechnology companies,” *J. Intellect. Cap.*, vol. 8, no. 3, pp. 517–537, 2007, DOI: 10.1108/14691930710774894.

[11] S. Sujoko, “The Effect of Share Ownership Structure, Leverage, Internal Factors and Factors External to Company Value (Empirical study of manufacturing and non-manufacturing companies on the Jakarta Stock Exchange),” *EKUITAS (Jurnal Ekon. dan Keuangan)*, vol. 11, no. 2, p. 236, 2017, DOI: 10.24034/j25485024.y2007.v11.i2.2236.

[12] M. C., etc. Jensen, "Theory of The firm: managerial behavior, agency cost, and ownership structure," *Finance. Econ.*, vol. 72, no. 10, pp. 1671–1696, 1976.

[13] A. Nugroho, “The Effects of Leverage, Profitability, Independent Commissioners and Ownership Concentration on Intellectual Capital Disclosures.” *Account. Anal. J.*, vol. 1, no. 2, 2012.

[14] P. Nikolaj Bukh, C. Nielsen, P. Gormsen, and J. Mouritzen, “Disclosure of information on intellectual capital in Danish IPO prospectuses,” *Accounting, Audit. Account. J.*, vol. 18, no. 6, pp. 713–732, 2005.

[15] I. K. Andari, “FACTORS AFFECTING THE INTELLECTUAL CAPITAL DISCLOSURE (Empirical Study of Banking Companies Listed on the Indonesia Stock Exchange in 2011-2012),” *Akuntansi, Progr. Stud. Ekon. Fak. Bisnis, D A N Surakarta, Univ. Muhammadiyah*, pp. 1–15, 2015.