Factors Affecting Intellectual Capital Disclosure in Indonesia Stock Exchange Period 2016-2019

by Azizul Kholis

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Abstract

This research aims to analyze the disclosure of intellectual capital of companies in Indonesia. The factors referred to include Independent Commissioners, Ownership Concentration, leverage and profitability. Agency theory is used as the basis for developing a conceptual framework to connect the variables being tested. The contribution of this research is to test the subjective factors, namely the variable of the existence of independent commissioners, the concentration of ownership combined with the objective variables which are derived from the company's financial data, namely leverage and profitability. The samples are 72 companies that consistently express clusters of intellectual capital-based companies in 2016 to 2019 are sourced from websites. www.idx.co.id the data analysis technique for hypothesis testing is multiple linear regression, using the SPSS version 20 application. The results of this study prove that all tested variables, namely independent commissioners, ownership concentration, profitability and leverage have influence to intellectual capital Disclosure. Thus, it strengthens the importance of information to the capital market about the determinants of disclosure of Intellectual Capital, both objectively and subjectively. This study is still several studies and the limitations of this study are the cluster sample so that the generalizability is low, the

recommendation for further research is to use a more precise sample and a longer observation period.

Keywords

Intellectual, Capital, Leverage, Profitability.

Introduction

The creating company value has increased significantly with the process of intellectual capital (Salvi et al., 2020). According to (Abeysekera, 2008) that voluntary disclosure of Intellectual Capital in annual reports, there is still little research that can describe the motivation behind such disclosures. Generally, the Intellectual Capital that is voluntarily disclosed in the annual report of listed companies has a relevant value in several studies in the United States of America. intellectual capital in Malaysia and contribute new assets as a moderating variable.

The intellectual capital measured by productivity, revenue, profitability and market performance has been identified as an intangible tools like resources, capabilities, and competencies that drive organizational performance or value creation (Lores et al., 2018, Xu & Li, 2019 and Pangestika, 2010). Conceptually, human capital accounting and literature on relevant values, regarding intellectual capital in the capital market, especially in developing countries, have received less widespread attention when compared to studies on intellectual capital in developed countries such as America and Europe. Intellectual capital is useful so that employees know how to contribute to value creation for the company (Ulum, 2015).

In Indonesia, the recognition of intellectual capital and its reporting in the balance sheet has not been taken seriously, so that the elements of *intellectual capital* that may actually be controlled by a company are not recognized and reported properly. This will certainly be detrimental to the company, because not acknowledging the knowledge assets controlled by the company will make the company value lower than it should be. In general, business people still have not found the right answer about what added value a company has.

Based on research conducted by (Mulyadi & Siska Ariyadi, 2018), it was found that company size, company age, *leverage*, and independent commissioners partially had no effect on disclosure *intellectual capital*. Further research was conducted by Mehrotra and Malhotra, 2017 and Zuliyati & Sri, 2018 conclude that managerial ownership and institutional ownership not influence to intellectual capital disclosure. The profitability,

leverage, company size, and foreign ownership have impact on intellectual capital disclosure.

This research is interesting to study because there are several different research results between the studies described earlier and also basically not many companies in Indonesia, especially manufacturing companies, provide information in company annual reports, even though it is based on research that is previously found that there is a positive effect when companies disclose their wealth creation process based on their intangible capital.

Literature Review

Intellectual Capital

Intellectual capital or intellectual capital has a very important and strategic role in the company and can affect endurance and competitive advantage (Rambe et al., 2018). Business people are starting to realize that the ability to compete does not only lie in the ownership of tangible assets but rather in the managerial advantages, innovation, information systems and human resources they have. Business organizations are increasingly emphasizing the importance of knowledge assets as a form of intangible asset (Nikolaj et al., 2005). Some of the benefits of intellectual capital include forming an organization to formulate strategies, assessing strategy execution, forming diversification and expansion decisions, used as a basis for compensation and communicating steps for external stakeholders (Ferreira et al., 2012) in (Ashari & Putra, 2016).

Independent Commissioner

According to (Dwipayani & Putri, 2016), Independent Commissioners are members of the Board of Commissioners who are not affiliated with the Board of Directors, other members of the Board of Commissioners and controlling shareholders, and are free from business relationships or other relationships that may affect their ability to act independently. Independent commissioners will create an independent, objective climate and promote equality as one of the main principles in paying attention to the interests of minority shareholders and other stakeholders. These variable data scales are:

$$\text{Independent Commissioner:} \frac{\text{Number of Commissioner Person}}{\text{Board of Commissioner}}$$

Ownership Concentration

Structure or ownership concentration in general can be viewed from two aspects. The first aspect is the amount of ownership of certain parties called insiders. The second aspect is the size of foreign ownership compared to domestic ownership (Suhardjanto & Wardhani, 2010). Ownership concentration is shares composition owned. The greater the level of ownership, the greater the *voting power* that is owned in making company decisions (Budi, 2013). This study uses the quotient between the largest number of shareholdings in the company and the number of shares outstanding in the company. The scale of this variable data is:

$$\text{Ownership Concentration:} \frac{\text{Number of Stock holder}}{\text{Stock on Market}}$$

Leverage

Leverage is the amount of debt used to finance or buy company assets, the goal is of course so that business profits can be maximized (Suhardjanto & Wardhani, 2010). Companies with higher ratios leverage will disclose more information. However, companies with leverage high tend to have critical commitment to Intellectual Capital (Rahman et al., 2019). The scale of these variables are:

$$\text{Leverage: (The amount of Liabilities / The amount of Assets) x 100 \%}$$

Profitability

Profitability is the organization's ability to generate profits within a certain period at a certain level of sales, assets and share capital. The company's profitability can be assessed in various ways depending on the profits and assets or capital that will be compared with one another (Aprisa, 2016 and Dey & Faruq, 2019). High profitability is one of the things that the company considers good to be disclosed in detail by the company. This study uses *return on assets* (ROA) (Wiagustini, 2020), namely by comparing profit after tax with total assets. The variable data scale is:

$$\text{Profitability:} \frac{\text{Earning After Tax}}{\text{Activa Total}}$$
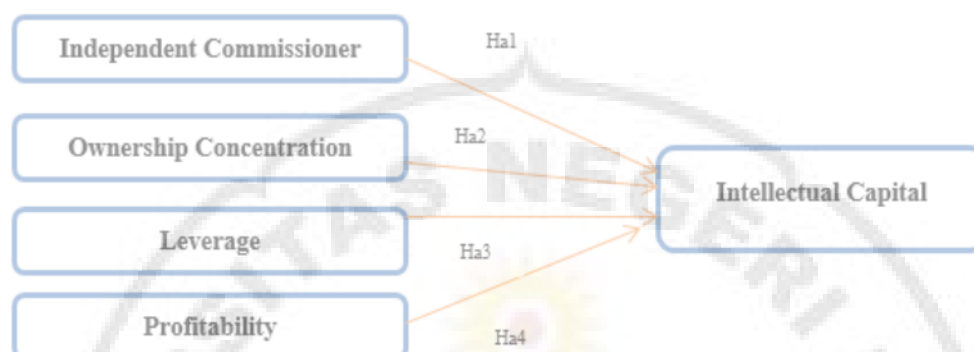
The conceptual framework occurs as follows:

Figure 1 Conceptual Framework

Research Method

The research data and information needed in this study, it is carried out by accessing data through the website on Indonesia Stock Exchange and acces on January 2020. The population in this study are 2016-2019. The sample used in this study used the *cluster sampling technique*, which is based on the grouping and categorize of the company's business fields. The sample used is 72 emiten from the sample frame of the population. The research sample based on clusters can be detailed in Table 1 below:

Table 1 Sample Companies

Categories of Companies	Number
Chemical Industry	11
Banking, Insurance and Financial service	12
Mining and Natural Resources Processing	11
Commodities trading	13
industry of Consumer goods	11
Plantation companies	14
Total	72

Data collection of variables in research this is using an financial statement from each company that is the research sample which consistent to disclosure during 2016 until 2019. The SPSS application as analysis tools for analysis in descriptive and hypothesis testing including best fit model testing.

Findings and Discussion

Statistics of Descriptive

Table 2 Descriptive Statistical Analysis

	.N.	The Minimum	The Maximum	The Mean	Deviation
Independent Commissioner	72	.20000	.66667	.4021148	.09753524
Ownership Concentration	72	.16145	.92125	.5176626	.21945285
Leverage	72	.11656	.90525	.4465673	.18713124
Profitability	72	-.04	.12	.0404	.03355
VAIC	72	.89643	4,23307	2.2648116.	.71035766
Valid N (list wise)	72				

Source: Processed Secondary Data, (2020).

The calculation of disclosure intellectual capital by measuring IC performance in a company by adding up the Value and other variable. The Equation of Multiple Regression for the hypothesis testing is:

$$Y = c + bx1 + bx2 + bx3 + bx4 + e$$

Remark:

Y = Intellectual Capital

C = Constanta

X_1 = Independent Commissioner

X_2 = Ownership Concentration

X_3 = Leverage

X_4 = Profitability

e = Error

Hypothesis Tested

Table 3 Partial Test Results: Statistical Test t

Hypothesis	*Independent*	t count	Sig.	Description
H_1	Independent Commissioner	2,640	0,010	Accepted
H_2	Ownership Concentration	2,086	0,040	Accepted
H_3	*Leverage*	0.434	0.003	Accepted
H_4	Profitability	12.260	0.000	Accepted

Source: Processed Secondary Data, (2020).

Based on Table 3 obtained by value Tc_{ount} equal to 2,640 <Tt_{able} 1.98861 and a significance of 0.010 <0.05 then H_1 is accepted, meaning that the independent commissioner has an impact on the intellectual capital. The commissioner guarantees that a company has understanding in disclosing intellectual capital. The results also supported by research (F. Vitolla, N. Raimo, A. Marrone, 2020) which states independent commissioner significant effect on the disclosure of intellectual capital Based on Table 3 obtained by value $Ta_{rithmetic}$ amounted to 2,086> Tt_{able} 1.98861 and a significance of 0.040 <0.05, H_2 is accepted, meaning that ownership concentration have effect on disclosure. This indicates that ownership concentration has a significant on disclosure intellectual means that an increase in ownership concentration by 1% will decrease intellectual capital by 0.518. The results of this study are also supported by research results by (Budi, 2013) and (Agung, 2017) which state that ownership concentration have impact on disclosure of intellectual capital. Table 3 Showed and obtained by value $Ta_{rithmetic}$ amounted to 0.434 <Tt_{able} 1,98861 and significance of 0.003 <0.05 then H_3 accepted, meaning that the leverage effect on intellectual capital. The results of this study are also supported by research results (Rahim et al., 2011) and (Rahman et al., 2019). Table 3 also obtained by value $Ta_{rithmetic}$ amounted to 12.260> Tt_{able} 1.98861 and significance of 0.000 <0.05 then H_4 accepted, meaning that profitability influence on disclosures. The Intellectual capital the thing which shows that company size has a effect on intellectual capital means that the increase in ownership concentration will increase the intellectual capital by 18,177. The results of this study are also supported by research results by (Heviana, 2017) and (Aprisa, 2016).

Table 4 Statistical F

.ANOVA[a].

		Squares	Degree of Freedom	Square	.F.Value	.p value
1	Regression.	31,987	6	5,331	34,238	.000[b]
	Residual	12,924	83	.156		
	Total	44,910	89			

a. Dependent Variable: VAIC
b. Predictors: (Constant), Profitability, Company Size, Company Age, Ownership Concentration, Independent Commissioner, Leverage
Source: Processed Secondary Data, (2020).

Based on Table 4, test calculation obtained the F value $_{calculated}$ of 34.238> F_{table} of 2.21 with a significant 0.000 < 0.05. Thus, simultaneously have an effect on disclosure intellectual capital.

Conclusion and Implications

The researchers can draw the following conclusions:

1. The independent commissioner variable affects disclosure intellectual capital.
2. Ownership concentration variable have impact on intellectual capital.
3. The Variable leverage does not affect the disclosure of intellectual capital.
4. Profitability have a significant effect on disclosure intellectual capital.

Based on the above conclusions as well as the limitations felt by the researcher during this research, the researcher provides suggestions for further research developments, especially related topic so the researcher provides some suggestions as follows:

1. The next researcher can examine more deeply about other variables not only independent commissioners, ownership concentration, *leverage* and profitability. The next researcher can add business risk, dependence on capital markets, type of company technology, *corporate governance*, and so on.
2. Researchers can further expand another country.
3. Management should disclose voluntarily owned. So that there is no more information gap between users of financial statements. In addition, disclosing intellectual capital owned will add value to the company in the eyes because the company is deemed to have provided information.

Acknowledgement

References

Abeysekera, I. (2008). Motivations behind human capital disclosure in annual reports. *Accounting Forum, 32*(1), 16–29. https://doi.org/10.1016/j.accfor.2006.11.006

Agung, N. (2017). Influence of Leverage, Profitability, Independent Commissioner and Ownership Concentration on Intellectual Capital Disclosure.

Aprisa, R. (2016). The Effect of Firm Size, Profitability, Auditor Type and Industry Type on Intellectual Capital Disclosure. *JOMFekom, 3*(1), 1393–1406.

Ashari, P., & Putra, I.N. (2016). The Influence of Company Age, Company Size, Profitability, Leverage and Independent Commissioner on Intellectual Capital Disclosure. *E-Journal of Accounting, 14*(3), 1699–1726.

Budi, A. (2013). Factors Affecting Intellectual Capital in Financial Institutions Listed on the Indonesia Stock Exchange. *Journal of Social Sciences Kopertis Region XI Kalimantan, 5*.

Dey, P.K., & Faruq, M.O. (2019). Determinants of Intellectual Capital Disclosure: An Investigation on DS30 Firms in Bangladesh. *Asian Journal of Accounting Perspectives*, 12(2), 27–48. https://doi.org/10.22452/ajap.vol12no2.2

Dwipayani, A.A., & Putri, I.G.A.M.A.D. (2016). Factors Influencing Intellectual Capital Disclosure. *E-Journal of Economics and Business*, 5(11), 3793–3822.

Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management*, 27(5), 2188-2200.

Ferreira, A.L., Branco, M.C., & Moreira, J.A. (2012). Factors influencing intellectual capital disclosure by Portuguese companies. *International Journal of Accounting and Financial Reporting*, 2(2), 278-298. https://doi.org/10.5296/ijafr.v2i2.2844

Heviana. (2017). Factors that affect intellectual capital.

Lores, L., Mas'ut, I.M., & Ginting, S. (2018). The Application of Good University Governance to Intellectual Capital on University Medan Area. *Proceedings of the 1st Unimed International Conference on Economics Education and Social Science* - UNICEES, 1202-1207. https://doi.org/10.5220/0009510012021207.

Bukh, P.N., Nielsen, C., Gormsen, P., & Mouritsen, J. (2005). Disclosure of information on intellectual capital in Danish IPO prospectuses. *Accounting, Auditing & Accountability Journal*, 18(6), 713–732. https://doi.org/10.1108/09513570510627685

Rahim, A., Atan, R., & Kamaluddin, A. (2011). Intellectual Capital Reporting in Malaysian Technology Industry. *Asian Journal of Accounting and Governance*, 2(1), 51–59. https://doi.org/10.17576/ajag-2011-2-6541

Rahman, M.M., Sobhan, R., & Islam, M.S. (2019). Intellectual Capital Disclosure and Its Determinants: Empirical Evidence from Listed Pharmaceutical and Chemical Industry of Bangladesh. *Journal of Business Economics and Environmental Studies*, 9(2), 35–46. https://doi.org/10.13106/jbees.2019.vol9.no2.35

Rambe, P., Dewi, C., & Ginting, S. (2018). Determinants of Intellectual Capital Disclosure by using Monetary and Non-monetary Variables. *In Proceedings of the 1st Unimed International Conference on Economics Education and Social Science - UNICEES*, 1097-1102. https://doi.org/10.5220/0009504810971102

Salvi, A., Vitolla, F., Giakoumelou, A., Raimo, N., & Rubino, M. (2020). Intellectual capital disclosure in integrated reports: The effect on firm value. *Technological Forecasting and Social Change*, 160. https://doi.org/10.1016/j.techfore.2020.120228

Suhardjanto, D., & Wardhani, M. (2010). Intellectual Capital Disclosure. *JAAI*, 14(1), 71–85.

Ulum, I. (2015). Intellectual Capital Disclosure; An Analysis Ihyaul Ulum Intellectual Capital Disclosure; An Analysis with Four Way Numerical Coding System Ihyaul Ulum. *Jurnal Akuntansi & Auditing Indonesia*, 19(1), 39–50.

Mehrotra, A.K., & Malhotra, R.P. (2017). Intellectual Capital Disclosure by the Indian Corporate Sector. *Businee & Management*, 19(2), 376–392.

Almira, N.P.A.K., & Wiagustini, N.L.P. (2020). Return on Asset, Return on Equity, Dan Earning Per Share Berpengaruh Terhadap Return Saham. *E-Jurnal Manajemen*, 9(3), 1069-1088.

Xu, J., & Li, J. (2019). The impact of intellectual capital on SMEs' performance in China: Empirical evidence from non-high-tech vs. high-tech SMEs. *Journal of Intellectual Capital, 20*(4), 488–509. https://doi.org/10.1108/JIC-04-2018-0074

Zuliyati, & Sri, I.F. (2018). Effect of Profitability, Leverage, Firm Size, Managerial Ownership, Institutional Ownership and Foreign Ownership on Intellectual Capital Disclosure. *Journal of Accounting*, 6(2), 131–143.

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