

**INTELLECTUAL CAPITAL DISCLOSURE ANALYSES****Achmad Saiful Ulum**

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Abstract

The study aims to determine the effect of profitability, firm size and leverage on intellectual capital disclosure. Profitability ratios are measured by Return on Equity, the company size ratio are measured by total assets and leverage is measured by a debt equity ratio. The data in this study are secondary data. The population used in this study are manufacturing companies listed in the Kompas 100, Indonesia Stock Exchange index in 2015-2017. The sample determination method was purposive sampling with sample criteria, namely, manufacturing companies that are consistently included in the calculation of the Kompas 100 index during the 2015-2017 study period and their financial statements use the rupiah currency. The method used to analyze the effect of profitability, firm size and leverage on intellectual capital disclosure is multiple regression analysis. The results showed that the fit model with adj-square value of 81.25% and normality assumption was fulfilled. This can conclude that multiple regression analysis is able to explain well the effect of profitability, firm size and leverage on intellectual capital disclosure. Hypothesis testing suggest that profitability, firm size and leverage have a significant effect on intellectual capital disclosure. The variable that is most able to explain changes in intellectual capital disclosure is leverage.

Keywords: Leverage, Firm Size, Profitability, Intellectual Capital Disclosure

Introduction

In the current era of globalization, with the development of information technology and science, it has also changed the perspective of companies in carrying out their activities to create corporate value. Business people are beginning to realize that in order to survive in the tight competition in the present era, companies cannot just rely on their physical wealth. Innovation, information technology and knowledge of human resources owned by the company are considered important in the process of value creation and increased competitiveness [1,2]. This brings an increased attention to intellectual capital. By managing intellectual capital, the company can maximize its resources, so that the company will be able to create more value and have an advantage in competition (3,4). Intellectual capital (ICD) is a company's assets in the form of human resources where these assets play an important role in the operation of a company and have an impact on increasing the value of the company so that the realization of motivation in creating competitive advantage. Intellectual capital plays an important and strategic role in the company [5].

With the increasing attention of business people to intellectual capital, the needs of stakeholders for complete information about the potential of the company are also increasing. So that the credibility and accountability of the company is an important point that can be done through reporting. Wider disclosure, including disclosure of intellectual capital, is expected to reduce the information gap and provide a better assessment of the company. In addition, intellectual capital disclosure is very important. [6] argue that the importance of intellectual capital is due to the following factors, first, the revolution in information technology and the information society. Second, the importance of knowledge and knowledge-based economy is being recognized. Third, changes in patterns of activity between individuals and network communities and the emergence of innovation as the main determinant of competitive advantage. In addition, intellectual capital is one of the information needed by investors to assess the company's ability to create wealth in the future [7,8]. The growing awareness about the importance of information encourages company owners to be more aware of the condition of the company not only in terms of financial statements but also non-financial reports on the overall condition of the company as outlined in the annual report.



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Researchers are interested in conducting research in the Indonesian context because the Bapepam regulation Kep134 / BL / 2006 requires companies that have been listed on the IDX to report their annual reports. The annual report contains the disclosure of financial and non-financial information both mandatory and voluntary. There are many mandatory disclosures required by the accounting profession related to physical capital. While intellectual capital as a non-physical capital disclosure is still voluntary. This study examines the influence of profitability, firm size, and leverage on intellectual capital disclosure in manufacturing companies. The reason researchers chose manufacturing companies is because manufacturing companies are companies that have a large size so that the company must disclose its strategic resources in the disclosure of intellectual capital needed by investors. In addition there are several researchers who concluded the difference in the effect of profitability, leverage and company size on intellectual capital disclosure

Literature review

Profitability on Intellectual Capital Disclosure

Profitability is the result of investing in intellectual capital in providing a sign of significant use in the form of investment. Thus, the higher the profitability of a company, the company will reveal more information about intellectual capital. The higher profitability of the company is a good thing for the company, so that the higher the profitability, the company will tend to reveal more detailed information. This detailed disclosure of information, including voluntary disclosure of intellectual capital, can improve the company's good name. The results of research conducted by [9,10,11,12] have stated that profitability affects the Intellectual Capital Disclosure. On the contrary the research that has been done by [13, 14] shows that profitability has no effect on intellectual capital disclosure.

H1 :There is an effect of profitability on intellectual capital disclosure.

Firm Size on Intellectual Capital Disclosure.

Company size describes the size of a company which is shown by total assets, total sales, average total sales and average total assets. Company size is the size of assets owned by the company. The larger Firm Size, the higher the company's demands to disclose broad information about intellectual capital. Disclosure of information can be used as a reference in the measurement of good management principles by the company because it contains components of intangible assets which creates difficulties in managing, measuring, and reporting. Research results [10,15,16,17] show that firm size affects intellectual capital disclosure. However, the results of research conducted by [1,18] show that there is no effect of Firm Size (size) on intellectual capital disclosure.

H2: There is an effect of Firm Size on Intellectual Capital Disclosure.

Leverage on Intellectual Capital Disclosure

The leverage ratio is the proportion of total debt to the average shareholder equity. This ratio is used as an illustration of the capital structure of the company, so it can be seen based on the level of risk of uncollectible debt. This ratio applies when the company is in need of funds, which creditors need extensive information about the company. Companies with a high level of leverage have an obligation to fulfill long-term creditor information needs, so the company provides broad information, especially about intellectual capital. The results of research conducted by [15,17,18] state that there is a significant influence between leverage on the Intellectual Capital Disclosure. While the research that has been done by [10, 14, 19,20] states that leverage has no effect on Intellectual Capital Disclosure

H3: There is an effect of Leverage on Intellectual Capital Disclosure.

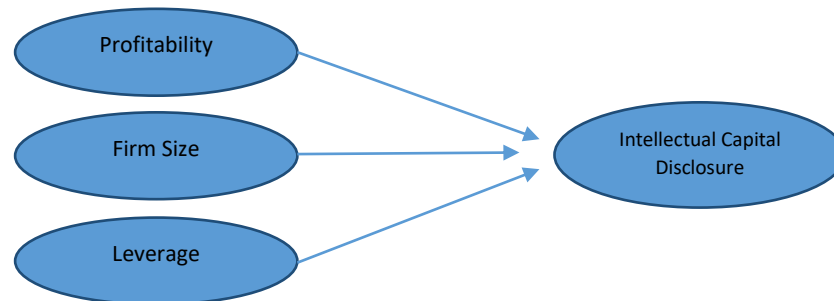


Figure 1. Frame Work

Research methods

The study aims to determine the effect of profitability, firm size and leverage on intellectual capital disclosure. The data in this study are secondary data. The population used in this study is a manufacturing company listed on the Kompas 100 Indonesia Stock Exchange index in 2015-2017. The method of determining the sample is purposive sampling with sample criteria, namely, a manufacturing company included in the calculation of the Kompas 100 index consistently throughout the 2015-2017 study period and its financial statements using the rupiah currency. The operational definition and measurement of the variables are as follows:

Intellectual Capital

Intellectual capital itself is generally defined as the difference between the company's market value and the book value of the company's assets or from its financial capital [11]. Intellectual capital is also often referred to as intangible assets or resources. Knowledge that creates value in a company, embodies and maintains a competitive advantage in a company [8]. [11] argue that intellectual capital is "material that is compiled, captured, and used in generating high asset values". Intellectual assets or assets consist of customer capital, employee capital, and organizational capital used by companies in the process of value creation and knowledge in expanding the value of a company [8]. Intellectual capital disclosure (ICD) is measured using the ICD index as follows:

$$ICDindex = (\sum di/M) \times 100\%$$

Where

ICD Index = Intellectual capital disclosure index

di :ICD score, score 1 if expressed in annual reports, 0 score if not disclosed in annual reports

M :Total number of items measured

Profitability

To be able to survive, a company must be profitable. Profitability according [9] is "the ability of the company to make a profit through its business operations by using assets owned by the company". According to [10] profitability is the net result of a number of policies and decisions chosen by management of an organization. Thus, it can be concluded that profitability is the company's ability to generate profits through a number of policies that have been determined by company management. This research will calculate profitability with Return on Equity (ROE). Return on Equity (ROE) is a measurement of income (income) available to company owners (both ordinary shareholders and preferred shareholders) for the capital they invest in the company

$$ROE = \frac{Net\ Income}{Shareholders\ Equity}$$



Firm Size

Company size describes the size of a company. Firm Size generally influences investors' judgment in making investment decisions. In general, Firm Size is measured by the amount of total assets. Because the value of total assets is generally very large compared to other financial variables, researchers calculated Firm Size which refers to the research conducted by [22] with the natural logarithm of total assets (natural logarithm of assets).

$$\text{Size} = \text{Ln} (\text{Total Asset})$$

Leverage

Leverage is a tool used in measuring the dependence on the use of funds from creditors to finance company assets. This ratio is used as a tool to measure how much the company has been financed by debt or external parties with the ability of the company that is described by capital [15]. According to [17]), defining the leverage ratio is a ratio that reveals how much funds have been provided by the creditor used for the survival of the company. This ratio is the proportion of total debt to total shareholder equity. This ratio also provides an explanation of the capital structure in a company, so that the level of risk of uncollectible debt can be known. In this study, leverage is measured using Debt to Equity Ratio (DER). DER is an investor risk in investing in a company. According to [19] DER describes the extent to which capital owners can cover debts to outsiders, thus the smaller the DER, the better the company. The equation is as follows:

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

The analytical method used to determine the effect of profitability, firm size and leverage on intellectual capital disclosure is a multiple regression method. Multiple regression is a method of parametric regression, which is strict with classical assumptions consisting of normality, autocorrelation, heteroscedasticity, multicollinearity and linearity. In this study the classic assumption test used is the normality test. Normality test is used to test whether the residuals are normally distributed or not. The normality test used in this research is Kolmogorov-smirnov test, if the significant value is more than 0.05, the residual is said to be normally distributed.

Results and discussion

Descriptive statistics give an overview of each research variable, Intellectual Capital, Profitability, Firm Size, and Leverage. Descriptive analysis results show that all mean values are greater than the standard deviation. This suggests that the observation data in this study are homogeneous. Multiple linear regression is employed to determine the effect of Profitability, Firm Size, Leverage on Intellectual capital. Multiple linear regression is one of the parametric regression that require parametric assumptions. The parametric assumption made in this study is normality.

Normality test

The normality test to test the normality of the residual regression was done using the Kolmogorov-Smirnov test. Error regression model is said to be normally distributed, if the significance value of Kolmogorov-Smirnov $> \alpha = 0.05$. The normality test hypothesis is as follows:

H0: Residuals are normally distributed

H1: Residual is not normally distributed

The results of the normality test showed that the significance value = 0.341 $>$ alpha (0.05), accepted H0, it can be concluded that the residuals are normally distributed.

Multiple Regression Analyse

The results of data processing with multiple linear regression informed that the suitability of the model test with F test showed significant results. The F test results inform that the model is able to explain well the relationship between the effect of Profitability, Firm Size, Leverage on Intellectual capital with R-square value of 81.25%.



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The test analyze the influence of each variable Profitability, Firm Size, Leverage on Intellectual Capital by testing the hypotheses presented in table 1 as follows:

Table 1. Hypothesis Test

Independent V on Dependent V	Regression coefficient	Pvalue	Information
Profitability →ICD	0,456	0.002	Affected
Firm Size →ICD	0.657	0.001	Affected
Leverage →ICD	0,778	0.000	Affected

H1 :There is an effect of Profitability on intellectual capital disclosure.

The hypothesis test results inform that profitability has a significant effect on intellectual capital disclosure. This is indicated by the value of the regression coefficient of 0.456 and a significance value of 0.002 <0.05 (Hypothesis 1 is accepted). The influence of profitability variables on intellectual capital disclosure, shows that the higher the ability of companies to obtain profits encourages companies tend to be more detailed in disclosing information, including information on intellectual capital. Profitability is the result of investing in intellectual capital in providing a sign of significant use in the form of investment. Thus, the higher the profitability of a company, the company will reveal more information about intellectual capital. The results of this study are in line with the research conducted by [9,10,11,12] which concluded that profitability affects the Intellectual Capital Disclosure.

H2: There is an effect of Firm Size on Intellectual Capital Disclosure.

The hypothesis test results inform that Firm Size has a significant effect on intellectual capital disclosure. This is indicated by the regression coefficient value of 0.657 and a significance value of 0.001 <0.05 (Hypothesis 2 is accepted). Company size describes the size of a company which is shown by total assets, total sales, average total sales and average total assets. The larger Firm Size, the higher the company's demands to disclose broad information about intellectual capital than companies that have a small size. Disclosure of information can be used as a reference in the measurement of good management principles by the company because it contains components of intangible assets which creates difficulties in managing, measuring, and reporting. The results of this study are in line with the research conducted by [10,15,16,17] which states that firm size affects intellectual capital disclosure.

H3: There is an effect of Leverage on Intellectual Capital Disclosure.

The hypothesis test results inform that leverage has a significant effect on intellectual capital disclosure. This is indicated by the regression coefficient value of 0.778 and a significance value of 0.000 <0.05 (Hypothesis 3 is accepted). The leverage ratio is the proportion of total debt to the average shareholder equity. This ratio is used as an illustration of the capital structure of the company. It can be seen based on the level of risk of uncollectible debt. This ratio applies when the company is in need of funds, which creditors need extensive information about the company. Companies with a high level of leverage have an obligation to fulfill long-term creditor information needs, so the company provides broad information, especially about intellectual capital. The results of this study are in line with the research conducted by [15,17,18] suggest that there is a significant influence between leverage on the Intellectual Capital Disclosure.

Conclusions and suggestions

The results showed that the fit model with adj-square value of 81.25% and normality assumption was fulfilled. This can conclude that multiple analysis is able to explain well the effect of profitability, firm size and leverage on intellectual capital disclosure. Hypothesis testing informs that profitability, firm size and leverage have a significant effect on intellectual capital disclosure. This shows that return on equity is able to measure profitability in explaining intellectual changes in capital disclosure of manufacturing companies. This shows that Ln Total assets is able to measure the size of the company in explaining intellectual changes in capital disclosure of manufacturing companies. Moreover, the debt equity ratio is able to measure leverage in explaining intellectual changes in capital disclosure of manufacturing companies. The variable that is most able to explain changes in intellectual capital disclosure is leverage.



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