

INTELLECTUAL CAPITAL DISCLOSURE STUDY ON AUTOMOTIVE COMPANIES IN INDONESIA

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ABSTRACT

Intellectual Capital Disclosure is a disclosure or reporting of the intellectual capital of a company. Intellectual capital disclosure is voluntary, so not all companies disclose their intellectual capital conditions. Intellectual capital Disclosure has implications on financial performance and firm value, this is supported by agency theory that intellectual capital disclosure will reduce information asymmetry so that it will minimize agency costs. Intellectual capital disclosure is also a signal that a company has high performance and a good future so that intellectual capital disclosure has the potential to affect financial performance and firm Value. Besides the Intellectual Capital Disclosure in improving the financial performance and firm value, the company also needs funding in the form of money to funds the company survival. Fulfilling funding needs in the form of money must also consider where the fulfillment of these needs comes from. Whether it comes from internal of the Company itself or uses external capital. This study aims to determine and explain the direct and indirect effect of Intellectual Capital Disclosure and Capital structure on the Financial Performance and Company Value. The type of this study is explanatory research with a quantitative approach, while the objects of this study are automotive companies listed on the Indonesia Stock Exchange for the 2016 to 2019 period. The sampling using purposive method, 11 samples were selected and by using the panel there were 44 panel data obtained. The data analysis technique used in this study is Path Analysis. The results of this study indicate that the Capital Intellectual Disclosure both directly and indirectly through financial performance has significant effects on Firm value. Directly, Capital structure has no significant effect on Firm value, however, through financial performance has a significant effect on firm value. Financial Performance has a significant effect on Firm Value.

Keywords: Intellectual Capital Disclosure, Financial Performance, Firm Value.

INTRODUCTION

In increasing competitiveness, one of the ways companies do is by making changes to the way they do business. Business change from a labor based business to a knowledge based business. Companies that implement knowledge based business are able to create a way of managing knowledge as a means of generating income. By implementing knowledge based business, the production and financial performance as well as firm value of the company will improve, the competitive ability of company is not only in ownership of tangible assets, but also in intangible assets such as innovation, organizational management, skills and resources. Companies will emphasize the importance of knowledge assets. One approach in valuing knowledge assets is intellectual capital (IC). Intellectual capital has become the focus of attention in various fields, namely financial management, information technology, sociology and accounting (Petty & Guthrie, 2000). Intellectual capital can be seen as knowledge in the formation, intellectual property and experience that can be used to create wealth (Stewart, 2010).

Intellectual capital is an intangible asset of a company, intangible assets in the company can be in the form of knowledge, information, experience possessed by human resources and company organization (Steward, 1997). The intellectual capital of company is a knowledge-based resource to create added value for the sake of achieving competitive advantage (Jardon & Martos, 2012). The main function of intellectual capital is to create added value for products and services for customers. Basically all costs incurred to improve intellectual capability deserve to be capitalized and recognized, but what is important is how to recognize, measure and disclose intellectual capital so that it can be identified how much it is able to contribute to the company's performance (Sharma et al., 2007).

Intellectual Capital Disclosure is a disclosure or reporting of the intellectual capital of a company. Intellectual capital disclosure is voluntary (An et al., 2011) so not all companies disclose their intellectual capital conditions. Intellectual capital Disclosure has implications on the company performance; this is supported by agency theory that intellectual capital disclosure will reduce information asymmetry so that it will minimize agency costs. Intellectual capital disclosure is also a signal that the company has high performance and a good future, so that intellectual capital disclosure has the potential to affect company performance. Experts in the field of intellectual capital divide intellectual capital disclosure into three dimensions, Internal Capital, External Capital and human Capital because these three are the main dominant factors in the production process (Abeysekera, 2007). The results of several studies including (Orens et al., 2009) with the research title of Intellectual Capital Disclosure cost of finance and firm value reveal that a good Capital intellectual Disclosure has a positive effect on firm value.

Besides the Intellectual Capital Disclosure in Improving the financial performance and firm value, the Company also needs funding in the form of money to funds the survival of company. Fulfilling Funding needs in the form of money must also consider where the fulfillment of these needs comes from. Whether it comes from internal of the Company itself or uses external capital. If the fulfillment of internal capital is insufficient, the company will use external sources of funding through the use of leverage.

Research by Arsiraphongphisit & Ariff (2005); Cheng et al. (2010) tested the effect of capital structure on firm performance. The influence of capital structure on company performance is not only based on stakeholder theory but also based on optimal capital structure theory. This theory states that the right mix of debt and equity will produce an optimal capital structure that will improve company performance (Modigliani & Miller, 1958 & 1963; Myers, 1984). Likewise, the effect of capital structure on company performance is based on the optimal capital structure theory which states that the optimal capital structure is one that maximizes company performance. This theory is the basis that the capital structure can become an instrument to improve company performance.

LITERATURE REVIEW

Intellectual Capital Disclosure

Various aspects of human life are registered as beings that grow and develop with human intellectual power which is a major advance in the fields of science, research, technology and overall progress. Knowledge is of importance for sustainable growth and progress in different fields. Various terms have been used for intellectual capital including "*tangible*", Knowledge assets, "*intangible assets*", "*intangible resources*", "*Intangible goods*" (Bontis et al., 2000).

Intellectual capital is generally intangible; this capital has become widely accepted as the company's main strategic asset that is capable of producing a sustainable competitive advantage and superior financial performance (Barney, 1991). Human resources depend on employees, such as competence, commitment, motivation and employee loyalty. Although human capital is recognized as the heart of intellectual capital creation, a characteristic feature of human resources is that it can disappear when employees leave (Bontis et al., 2000).

Stewart (2010) defines intellectual capital, namely: (1) Intellectual capital is entirely what individuals know and give to the company that produces a competitive advantage. (2) Intellectual capital is intellectual material such as knowledge, information, intellectual ownership rights and experiences that create wealth. Intellectual capital is an intangible asset of a company, which can be in the form of knowledge, information, experience owned by human resources and company organization.

Intellectual Capital Disclosure is a disclosure or reporting of the intellectual capital of company, intellectual capital disclosure is a signal that the company has high performance and a good future so that intellectual capital disclosure has the potential to have an influence on company performance. Signaling Theory states that companies should signal their superiority in the market; this signal will make investors and stakeholder's assess and make decisions that are more profitable for the company (Whiting & Miller, 2008).

Capital Structure

Capital structure is a mix of debt, preferred stock, and common stock that the company plans to increase capital (Brigham & Houston, 2021). Debt as a component in the capital structure of company is an instrument that can reduce agency conflicts arising from the tendency of managers to make decisions that are not in line with those desired by stakeholders through engagement costs (component of agency costs). This is because debt can improve company performance by forcing managers to be more focused and disciplined in using funds so that later the tendency of inefficient use of stakeholder funds can be reduced. Debt can be an effective substitute for dividends, because the manager must release cash flows in the future in a way that cannot be achieved by increasing dividends. Management can improve company performance by determining the right debt and equity ratio. Capital structure policy involves a balance (trade-off) between risk and rate of return. Using more debt means increasing the risk borne by stakeholders as well as increasing the expected rate of return. Companies often use less debt than is determined by the optimal capital structure to ensure that they can raise capital from debt if needed (Brigham & Houston, 2021). Capital structure is very important for the survival of the company and is one of the main topics in the financial sector. There are several theories of capital structure policy, namely:

1. Modigliani & Miller (1963) & Miller & Modigliani (1961) perfected their theory known as MM theory with taxes. The theory of MM without tax is considered unrealistic so that MM includes the factor of tax in their theory. Taxes are paid to the government, which means it is a cash outflow. Debt can be used to save taxes, because interest can be used as a tax deduction.
2. Optimal financing policy theory (optimal capital structure): This theory explains the importance of having an optimal funding policy so that companies do not experience financial problems due to excessive debt (Modigliani & Miller, 1958; Miller & Modigliani, 1961; and Myers, 1984). If the company is in a condition of low profit or even loss, funding through equity is better, because if the company does not have cash flow, dividends can be postponed or not paid. If the company is in a profitable condition, funding using debt is more effective because the amount of interest does not increase according to profit as dividends.

3. Trade-off theory in determining the optimal capital structure includes several factors, including taxes, agency costs and financial distress costs but still maintains the assumption of market efficiency and symmetric information as a balance and benefits of using debt.

METHODOLOGY

This study is classified as an explanatory research, because this study was conducted to explain both direct and indirect effects of Intellectual Capital Disclosure and Capital Structure on Financial Performance and Firm value. In addition, the reason for choosing this type of study is to test the proposed hypothesis. It is hoped that this hypothesis can explain the effect of the independent variables on the dependent variable.

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that the researcher determines to study and draw conclusions (Sugiyono, 2010). The populations in this study are 13 Automotive Companies listed on the BEI in 2016 - 2019. The sample in this study is taken using purposive sampling method, a technique of determining the sample with certain criteria or considerations in accordance with the objectives or research problem. There are 11 companies that meet the criteria, so that during 2016-2019, 44 panel data were obtained using panels. The analysis used is Path analysis.

RESULTS AND DISCUSSION

Factor Analysis for the Intellectual Capital Disclosure Variable (X1)

Intellectual Capital Disclosure Variable (X1) is measured by two indicators, namely Internal Capital (X1.1) and External Capital (X1.2). Following is the result of the factor analysis for the Intellectual Capital Disclosure variable (X1) as shown in Table 1.

Table 1	
FACTOR ANALYSIS FOR THE INTELLECTUAL CAPITAL DISCLOSURE VARIABLE (X1)	
Indicator	Loading
X1.1 Internal Capital	0.915
X1.2 External Capital	0.915

Source: Primary Data Processed, 2021

The two indicators of Internal Capital (X1.1) and External Capital (X1.2) are significant as a measure of the Intellectual Capital Disclosure variable (X1), this can be seen from the loading value above 0.4. The loading value shows that the first indicator, namely Internal Capital (X1.1) and External Capital (X2), is an equally strong indicator as a measure of the Intellectual Capital Disclosure variable (X1), with a loading value of 0.915. Therefore it can be said that the Intellectual Capital Disclosure is more reflected by Internal and External Capital. Intellectual Capital as a knowledge resource in the form of employees, customers, processes, or technology that can be used to create value and improve the competitive advantage of company. Not only financial information that must be submitted to the financial statements users. There are other things that can explain the added value of a company, namely innovation, discovery, knowledge and skills of human resources, relationships with consumers and so on. This non-financial information is known as knowledge capital or intellectual capital, which is difficult to convey to parties outside the company because there is no accounting standard that regulates it. As a result, the added value of the company is never known by outsiders. Intellectual capital disclosure can be caused by several factors, both internal factors such as company age and company size as well

as external factors such as the Public Accounting Firm that audits the company's financial reports. Internal factors reflect the characteristics of the company in determining the extent of information disclosure while external factors are parties outside the company who use the information about company as a consideration for various kinds of decisions which ultimately expand the company information.

Factor Analysis for Capital Structure Variable (X2)

The Capital Structure variable (X2) is measured by two indicators, namely Debt Equity Ratio (X2.1) and Debt Ratio (X2.2). Following is the results of the factor analysis for the Capital Structure variable (X2) as shown in Table 2.

Indicator	Loading
X2.1 Debt Equity Ratio	0.946
X2.2 Debt Ratio	0.946

Source: Primary Data Processed, 2021

The Capital Structure variable (X2) is measured by two indicators, namely the Debt Equity Ratio (X2.1) and Debt Ratio (X2.2), it can be seen from the three loading values that have a value above 0.4. This also shows that the Capital Structure is seen implicitly from the level of Debt Equity Ratio (X2.1) and Debt Ratio (X2.2). The results of the factor analysis show that the loading values are the same. If the focus is on improving the Capital Structure, the Debt Equity Ratio (X2.1) and Debt Ratio (X2.2) must be considered. Capital structure is the amount of debt and or equity used by a company to finance operational activities and purchase company assets. This structure is usually expressed or represented by the debt-to-equity ratio. In other words, the capital structure is used as an instrument of management decision in considering and determining the long-term funding of company. In-depth research is needed in determining the optimal Capital Structure for each type of company. Because after all the company must find a Capital Structure that is not detrimental to both investors, creditors, and the company itself. Managers must know the internal and external factors that can influence their Capital Structure decisions. Profitability, company size, asset tangibility, and cash flow-related ratios are important factors in determining Capital Structure.

Factor Analysis for Financial Performance Variable (Y1)

The Financial Performance variable (Y1) is measured by two indicators, namely Return On Assers (Y1.1) and Return On Equity (Y1.2). Following is the results of the factor analysis for the Financial Performance variable (Y1) as shown in Table 3.

Indicator	Loading
Y1.1 Return On Assers	0.913
Y1.2 Return On Equity	0.913

Source: Primary Data Processed, 2021

The Financial Performance variable (Y1) is measured by two indicators, namely Return on Assets (Y1.1), and Return on Equity (Y1.2), indicating that both are significant as a measure of the Financial Performance variable (Y1), because the three loading values are above 0.4. The *loading* value on the first and second indicators shows that Return on Assets and Return On Equity have important role in shaping Financial Performance in a company. Financial performance is the strength possessed by the financial statements of company. Financial analysis / financial ratio analysis is a process to determine the strengths and weaknesses of the company's finances by knowing the relationship between the items contained in the statement of financial position and profit and loss, thus ratio analysis is used as a standard for evaluating the statement of financial position and financial performance.

Factor Analysis for Firm Value Variable (Y2)

Firm Value Variable (Y2) is measured by two indicators, namely Price Earning Ratio (Y2.1), and Earning per Share (Y2.2), and then each indicator is presented with the results of factor analysis for the Firm Value variable (Y2) (Table 4).

Indicator	Loading
Y2.1 Price Earning Ratio	0.869
Y2.2 Earning Per Share	0.858

Source: Primary Data Processed, 2021

Firm Value Variable (Y2) is measured by two indicators, namely Price Earning Ratio (Y2.1) and Earning per Share (Y2.2). From the results of the factor analysis, it can be seen that the *loading* value of both of them is above 0.4 which indicates that the two indicators are significant as a measure of the Firm Value variable (Y2). The loading value of the two indicators explains that to create prosperity for the stakeholders, these two indicators are needed. Firm value is the stock market value, because firm value can provide maximum prosperity for stakeholders if the share price of company increases. The higher the share price, the higher the prosperity for stakeholders. To achieve firm value, investors generally leave the management to professionals. This firm value is justified by signaling theory, where firm value will provide a high value if it is supported by a good signal from the internal of company.

Path Analysis

In Path analysis, the model suitability indicator (goodness of fit model) is the total determination coefficient obtained as follows:

Total Determination Coefficient

$$R_{total}^2 = 1 - Pe_1^2 Pe_2^2$$

$$R_{total}^2 = 1 - (1 - R_1^2) (1 - R_2^2)$$

$R_1^2 = 0.767$, and $R_2^2 = 0.649$ are the *Rsquare* value of the first, and second equation model, respectively. R_1^2 of 76.7% indicates that 76.7% of Financial Performance is influenced by Intellectual Capital Disclosure and Capital Structure and 23.3% is influenced by other factors that are not included in this study. R_2^2 of 64.9% indicates that 64.9% Firm Value is influenced by

Intellectual Capital Disclosure, Capital Structure and Financial Performance, while the remaining 35.1% is by other factors that are not included in this study. So that it is obtained

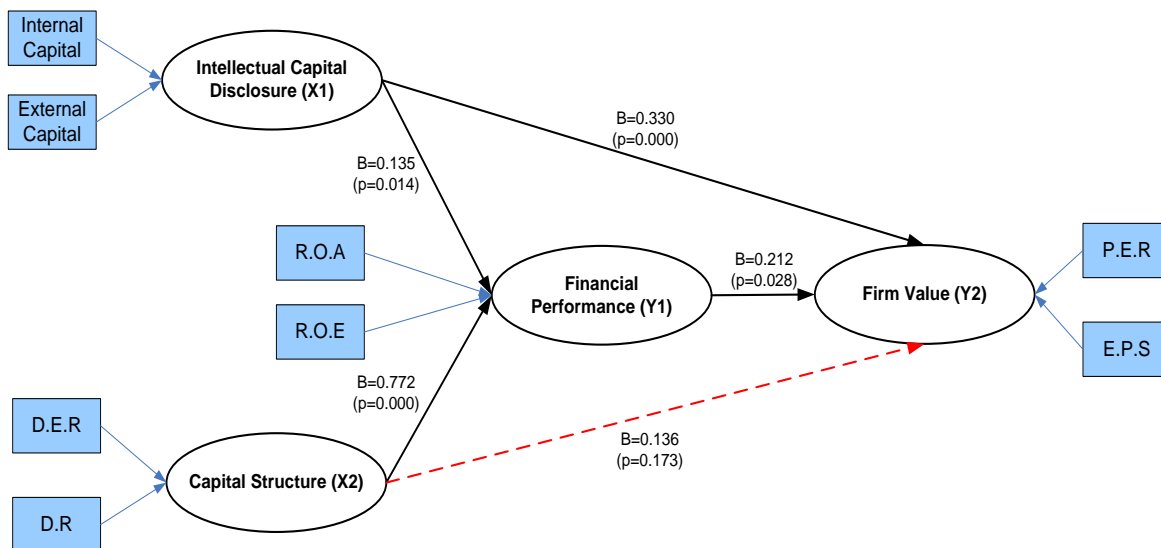
$$R^2_{total} = 1 - (1-0.767) (1-0.649) = 0.9182$$

From the total determination coefficient value (R^2_{total}) of 0.9182 In the Path diagram it is obtained a total determination coefficient of 0.9182 or the information contained in the data is 91.82% which can be explained by the path model, while the remaining 8.18% is by other factors that are not included in this study, so the results of the path analysis are quite feasible to use. Furthermore, see Table 5 which presents the results of the path analysis.

Realationship	Coefficient	t-count	Sig t	Conclusion
X1 ke Y1	0.135	2.488	0.014	Significant
X2 ke Y1	0.772	14.187	0.000	Significant
X1 ke Y2	0.330	4.837	0.000	Significant
X2 ke Y2	0.136	1.368	0.173	Non Significant
Y1 ke Y2	0.212	2.223	0.028	Significant
t-table=2.110; $R_1^2 = 0.767$; $R_2^2 = 0.649$				

Source: Primary Data Processed, 2021

Based on the results of the path analysis, the overall results of the path analysis are obtained as shown in Figure 1 below:



Note: Information: dotted line in red indicates a non significant effect

**FIGURE 1
PATH ANALYSIS RESULTS**

Based on Table 5 and Figure 1, it can be explained that intellectual capital disclosure, both directly and indirectly through financial performance, has a significant effect on the value of the company, meaning that when a company conducts intellectual capital disclosure, there is a signal that the company is in good condition so that investors believe and ultimately have a

significant effect on both the financial performance and firm value. Directly, Capital structure does not have a significant effect on firm value, while the indirect effect through the financial performance has a significant effect. These results indicate that when the company's capital structure increases, investors are still in a state of uncertainty in making decisions to invest in the company, but even though the capital structure has increased and the financial performance is in good condition, investors believe that the use of funds in the company is according to its intended purpose and this has an impact on the effect on the firm value.

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