The Influence of Intellectual Capital, Company Size and Profitability on Disclosure of Intellectual Capital and the Effect on Market Capitalization in Manufacturing Companies

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Abstract:- This study aims to examine intellectual capital, company size and profitability on intellectual capital disclosure and its effect on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period. The population in this study were all manufacturing companies listed on the IDX in 2014-2018. Of the 146 listed companies, 73 sample companies were selected using a purposive sampling method. The data used in this research is secondary data. The hypothesis in this study uses the t-test and F test. The results of hypothesis testing show that intellectual capital has no significant effect on disclosure of intellectual capital, company size has a positive and significant effect on disclosure of intellectual capital, profitability does not have a significant effect on disclosure of intellectual capital, the capital. Intellectual property does not have a significant effect on market capitalization, company size has a positive and significant effect on market capitalization, profitability has a positive and significant effect on market capitalization, intellectual capital disclosure has a positive and significant effect on market capitalization, and intellectual capital disclosure cannot mediate the effect of intellectual capital, firm size and profitability on market capitalization.

Keywords:- intellectual capital, company size, profitability, disclosure of intellectual capital, market capitalization.

I. INTRODUCTION

Excellence in competing with the application of science and technology is an essential thing in this day and age. The measurement tool in science and technology in companies is intellectual capital. Intellectual capital is an invisible (intangible) resource that a company develops to add value to the company.

Setianto (2014) found that intellectual capital and profitability do not affect the disclosure of intellectual capital. It is inversely proportional to research conducted by Utama (2015) which found that profitability has a positive effect on disclosure of intellectual capital. Ulum (2015) found that intellectual capital has no effect on disclosure of intellectual capital, and disclosure of intellectual capital has an effect on market capitalization. Wahyu (2009) found that firm size does not have the disclosure effect of intellectual capital.

Due to the gaps between the high economic growth and GDP with companies that have gone bankrupt in Indonesia and the gaps in the results of previous research on disclosure of intellectual capital, the author wants explicitly to look at the effect of intellectual capital, company size, and profitability on disclosure of intellectual capital. The author also wants to see the effect of disclosure of intellectual capital on market capitalization, and it tested on manufacturing companies listed on the Indonesia Stock Exchange in the 2014-2018 periods.

II. LITERATURE REVIEW

A. Intellectual Capital and Disclosure of Intellectual Capital

   ➢ Intellectual Capital

   Intellectual capital is capital in the form of non-physical or intangible such as science and technology. Ramashar et al. (2019: 235) revealed that intellectual capital is an intangible asset in the form of information on the development of knowledge that is useful for increasing competitive advantage and company performance. Bontis (1998: 67) also states that intellectual capital is an intangible thing in the form of resources, capabilities, and competencies that used in moving the organization in creating corporate value.

   It can conclude that intellectual capital is a knowledge, but not all experience includes intellectual capital. Thus, the scope of intellectual capital is narrower than expertise. Besides, knowledge is not the same as science. Intellectual capital is a part of the experience that can benefit the company. Benefit here means that the background can contribute something or contribute, which can add value and different uses for the company. Additional means that knowledge is one of the identification factors that distinguishes a company from other companies.
Disclosure of Intellectual Capital

Aida and Rahmawati (2015: 109) state that intellectual capital disclosure is the provision of information about intellectual capital owned by a company which consists of several parts, namely employees, customers, information technology, processes, research and development, and a strategy statement. Furthermore, Guthrie and Petty (2000) did not convey an explicit definition of intellectual capital disclosure. Still, they did mention the fact that currently, disclosure of intellectual capital provides more significant benefits than in the past. The economic sector, which has the most considerable advantage, especially has the characteristics of a dominant industry, which then changes. The manufacturing industry has changed to the high technology, financial and insurance services segments.

B. Company Size

Company size is to determine the size of the company. U.U. No. 20 of 2008, classifies company sizes into four categories, namely micro, small, medium and large enterprises. The grouping of company sizes based on the total assets owned and the total annual sales of the company which consists of micro, small, medium and large businesses.

C. Profitability

Profitability is a measuring tool used by companies to see the company's ability to generate profits. Profitability will compare the yield from a period with the gain in the previous period. The usual thing is to compare the current year's profit with the last year's profit. Profitability can use as a financial assessment that investors get on equity. Profitability can also use to review the profit obtained from operating activities. Profitability is to assess the ability of assets to generate profits.

D. Market Capitalization

Boedi (2008) states that the market price is multiplied by the number of shares outstanding; the market value will be obtained, which is called market capitalization. Market capitalization can be said to be the price that must pay to own a public company. Market capitalization can use as an assessment of the success or failure of a public company.

E. Framework

![Diagram showing the framework]

F. Hypothesis

- H2: Company Size Has a Positive Effect on Intellectual Capital Disclosure
- H3: Profitability has a positive effect on intellectual capital disclosure
- H4: Intellectual Capital Has a Positive Effect on Market Capitalization
- H5: Company Size Has a Positive Effect on Market Capitalization
- H6: Profitability has a positive effect on market capitalization
- H7: Disclosure of Intellectual Capital Has a Positive Effect on Market Capitalization
- H8: Disclosure of Intellectual Capital can Mediate the Relationship Between Intellectual Capital, Company Size, and Profitability with Market Capitalization

III. RESEARCH METHODOLOGY

This type of research used in this research is causal which aims to analyze how a variable affects other variables. This study is to examine the effect of Intellectual Capital, Company Size, and Profitability, on Intellectual Capital Disclosure and its effect on Market Capitalization. This research was conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2014 to 2018 by accessing the official website www.idx.co.id.
IV. RESULT

A. Regression Analysis Test

Results of Equation 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.098362</td>
<td>0.455206</td>
<td>2.412892</td>
<td>0.0163</td>
</tr>
<tr>
<td>X1</td>
<td>-0.014187</td>
<td>0.008739</td>
<td>-1.623371</td>
<td>0.1054</td>
</tr>
<tr>
<td>X2</td>
<td>0.093172</td>
<td>0.016048</td>
<td>5.805783</td>
<td>0.0000</td>
</tr>
<tr>
<td>X3</td>
<td>0.018537</td>
<td>0.010209</td>
<td>1.815714</td>
<td>0.0702</td>
</tr>
</tbody>
</table>

Effects Specification

- Cross-section random: 0.228814, Rho: 0.6772
- Idiosyncratic random: 0.157977, Rho: 0.3228

Weighted Statistics

- R-squared: 0.102071, Mean dependent var: 1.112292
- Adjusted R-squared: 0.094609, S.D. dependent var: 0.165585
- S.E. of regression: 0.157557, Sum squared resid: 8.961548
- F-statistic: 13.67877, Durbin-Watson stat: 1.722442
- Prob(F-statistic): 0.000000

Unweighted Statistics

- R-squared: 0.282974, Mean dependent var: 3.770219
- Sum squared resid: 27.10046, Durbin-Watson stat: 0.569575

Table 1
### Results of Equation II

**Dependent Variable: Y2**

- **Method:** Panel EGLS (Cross-section random effects)
- **Date:** 07/09/20  **Time:** 14:17
- **Sample:** 2014–2018  **Periods included:** 5
- **Cross-sections included:** 73
- **Total panel (balanced) observations:** 365

**Swamy and Arora estimator of component variances**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>X1</td>
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<tr>
<td>X2</td>
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<tr>
<td>X3</td>
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<td>0.034509</td>
<td>4.712104</td>
<td>0.0000</td>
</tr>
<tr>
<td>Y1</td>
<td>0.573981</td>
<td>0.179609</td>
<td>3.195720</td>
<td>0.0015</td>
</tr>
</tbody>
</table>

**Effects Specification**

- **S.D.**  **Rho**

| Cross-section random | 1.263433 | 0.8632 |
| Idiosyncratic random  | 0.502910 | 0.1368 |

**Weighted Statistics**

- **R-squared** | 0.383039 |
- **Adjusted R-squared** | 0.376184 |
- **S.E. of regression** | 0.509508 |
- **F-statistic** | 55.87635 |
- **Prob(F-statistic)** | 0.000000 |

**Unweighted Statistics**

- **R-squared** | 0.669471 |
- **Sum squared resid** | 728.3857 |

| Table 2 |

Based on the table above, it can be seen that the simultaneous test results (statistical F) of equation 1 indicate that the resulting significant value is 0.000, which is smaller than 0.05. The results of the F test indicate that all independent variables in this study, namely intellectual capital, firm size and profitability together (simultaneously) have a significant effect on the dependent variable, namely the disclosure of intellectual capital. Based on the simultaneous test results in equation two above, it can be seen that the simultaneous test results (statistical F) indicate that the resulting significant value is 0.000, which is smaller than 0.05. The results of the F test indicate that intellectual capital, firm size, profitability, and intellectual capital disclosure simultaneously (simultaneously) have a significant effect on market capitalization.

Based on the partial test results in equation one above, intellectual capital (X1) has a significance value of 0.1054 > 0.05. These results indicate that partially intellectual capital (X1) does not have a significant effect on intellectual capital disclosure in manufacturing companies listed on the Indonesia Stock Exchange for the 2014–2018 period. Firm size (X2) has a significance value of t of 0.0000 < 0.05. These results indicate that company size (X2) is partially proven to have a significant effect on intellectual capital disclosure in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014–2018 period. Meanwhile, profitability (X3) has a significance value of t of 0.0702 > 0.05. These results indicate that partially profitability (X3) does not have a significant effect on the disclosure of intellectual capital in manufacturing companies listed on the Indonesia Stock Exchange for the period 2014–2018.

Based on the partial test results in equation two above, intellectual capital (X1) has a significance value of 0.7938 > 0.05. These results indicate that intellectual capital (X1) partially does not have a significant effect on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014–2018 period. Firm
size (X2) has a significance value of \( t \) of 0.0000 <0.05. These results indicate that company size (X2) is partially proven to have a significant effect on market capitalization in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period. Profitability (X3) has a significance value of \( t \) of 0.0000 <0.05. These results indicate that profitability (X3) is partially proven to have a significant effect on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period. Intellectual capital (Y1) has a significance value of \( t \) of 0.0015 <0.05. These results also indicate that intellectual capital (Y1) is partially proven to have a significant effect on market capitalization in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period.

Based on the equation table 1 above, it can be seen that the value of R Square (R2) is 0.102, which means that intellectual capital, company size and profitability can explain the disclosure of intellectual capital in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period of 0.102 or 10.2%. Meanwhile, the rest are influenced or explained by other variables not included in this model.

Based on the equation table 2 above, it can be seen that the value of R Square (R2) is 0.383 which means that intellectual capital, company size, profitability and intellectual capital disclosure can explain the market capitalization of manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period is 0.383 or 38.3%. Meanwhile, the rest are influenced or explained by other variables not included in this model.

### B. Path Analysis Test

The results of the path analysis above show that the magnitude of the direct influence of company size on market capitalization is \( p1 = 1.024 \). In contrast, the extent of the indirect effect is calculated by multiplying the indirect coefficient, namely \( p2 \times p3 = 0.093 \times 0.574 = 0.053 \). So the disclosure of intellectual capital cannot mediate the effect of company size on market capitalization in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period.

The results of the path analysis above show that the magnitude of the direct effect of intellectual capital on market capitalization is \( p1 = 0.163 \). In contrast, the extent of the indirect effect is calculated by multiplying the indirect coefficient, namely \( p2 \times p3 = 0.018 \times 0.574 = 0.010 \).

So it can be seen that the direct effect of profitability on market capitalization is stronger than the indirect effect through disclosure of intellectual capital (0.163> 0.010). Thus, it can be concluded that intellectual capital disclosure cannot mediate the impact of profitability on market capitalization in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
V. CONCLUSION AND RECOMMENDATION

A. Conclusions

Based on the results of research and discussion in the previous chapter, several conclusions can be drawn as follows:

- Intellectual capital does not have a significant effect on intellectual capital disclosure in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Company size has a positive and significant effect on intellectual capital disclosure in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Profitability does not have a significant effect on the disclosure of intellectual capital in manufacturing companies listed on the Indonesia Stock Exchange for the period 2014-2018.
- Intellectual capital does not have a significant effect on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Company size has a positive and significant effect on market capitalization in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Profitability has a positive and significant impact on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Disclosure of intellectual capital has a positive and significant effect on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
- Disclosure of intellectual capital cannot mediate the effect of intellectual capital, company size and profitability on market capitalization in manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.

B. Suggestions

Based on the conclusions in this study, several suggestions can be made, namely as follows:

- Manufacturing companies listed on the IDX advised to maintain and improve these three factors so that the company's market capitalization value can increase.
- Future research is expected to re-examine the influence of other variables that can affect intellectual capital disclosure and market capitalization. Some of the variables that can be examined include liquidity ratios, leverage, information asymmetry, good governance and so on.
- The results of this thesis research reveal that intellectual capital disclosure cannot mediate the effect of intellectual capital, firm size and profitability on market capitalization. So that in further research, it is expected to re-test other mediating variables to determine whether there are variables that can mediate the effect of intellectual capital, company size and profitability on market capitalization or not.

REFERENCES


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