INTELECTUAL CAPITAL, GREEN ACCOUNTING, AND COMPANY PERFORMANCE WITH THE MANUFACTURING COMPANY

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ABSTRACT

This study aims to determine the application of Intellectual Capital and green accounting, and company performance with the Manufacturing Company. This research uses quantitative research. The population in this study are mining companies listed on the Manufacturing Company for 2021-2023. The sampling technique used in this study used purposive sampling. The number of companies sampled in this study were 40 companies. The type of data used is secondary data, namely in the form of financial reports and annual reports obtained through the official website of the Indonesia Stock Exchange and the official websites of related companies. The dependent variable used in this study is Company Performance. Meanwhile, the independent variables use intellectual capital and green accounting. The data analysis method used is panel data regression analysis with the help of the SPSS application program. The results of this study indicate that intellectual Capital and green accounting have a positive and significant effect on company performance.

INTRODUCTION

Intellectual Capital is able to improve the company's financial performance. Financial performance of the company, advances in technology and sophisticated information and the collection of fast information make every company increase the company's capacity. Information makes every company increase the company's capacity better by the company can also be seen from the share ownership of a company. Then there is managerial ownership by the management which will lead to a supervision of the policies taken by the management of the company, supervision of the policies taken by the company's management. The shareholders tend to want to reduce the use of debt because the amount of debt will increase the company’s risk.

The amount of debt will increase company risk. Managerial ownership is a condition that indicates that the manager owns shares in the company or is a shareholder of the company, which is indicated by the percentage of ownership in the company. Shareholders of the company which is indicated by the percentage of ownership shares by the company's management. Managerial ownership is related to agency theory agency theory which states that if the interests of managers and owners can be aligned, managers will not be motivated to improve the quality of accounting information and the informativeness of earnings (Mahoney et al., 2014). Informativeness of earnings (Mahadewi and Krisnadewi, 2017).

The purpose of green accounting is to fulfill all forms of corporate responsibility to the environment as a result of the company's operational activities that may cause damage and degradation of the environment. Environmental preservation is beneficial for the surrounding community as well as for the company in the long run. In carrying out its operational activities, the company is required to care about the environment (community). Companies are required to pay attention to the impacts caused in carrying out operational activities to achieve optimal profits. The company is not an entity that only operates for its own interests but must provide benefits to its stakeholders, including creditors, suppliers, customers, government and society (Ghozali and Chariri, 2007: 409).

The results of previous research by Adriana (2022) which examined the effect of implementing green accounting on the company's financial performance explained the results that green accounting partially affects the company's financial performance, this is because companies in increasing profitability continue to make efforts to preserve the environment do not damage the environment and comply with norms and ethics in accordance with sharia principles. Improved environmental performance indicates that the company has implemented environmental accounting properly which will affect the increase in company profitability and has good financial performance. However, this is inconsistent with the results of research by Faizah (2020) studying the effect of Green Accounting Implementation on Financial Performance. Explaining the results that Green Accounting variables have no effect on financial performance as measured using net profit margin. Researchers explain that green accounting proxied
by environmental activities, environmentally friendly products and environmental performance has no effect on financial performance proxied by net profit margin.

The results of research conducted by Adriana (2021), which state that green accounting partially has a significant effect and on the company's financial performance. The same results are also shown by Damayanti's research (2020), which states that green accounting partially has a significant effect and on the company's financial performance. Meanwhile, research (Faizah, 2020) shows the result that green accounting has no effect on financial performance. This research is the same as research conducted by (Febriany N., 2019), (Landion, 2019) shows that Intellectual Capital has a positive effect on company's financial performance. Meanwhile (Hidayat, 2019) found the results that intellectual capital has no effect on financial performance. This research is the same as research conducted by (Hidayat, 2019).

The next explanation is that companies that implement green accounting require a special allocation of environmental costs, these costs are considered as expenses that can reduce company profits, these expenses are considered as future investments. This explains that there are differences in the results obtained from previous studies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Legitimacy Theory

Legitimacy theory was proposed by Dowling and Pfeffer (1975). This theory explains that companies must ensure that the company's operations are still within the norms accepted by society. This theory is based on the idea that the company will continue its existence if the values in the company are in accordance or in harmony with the values or norms prevailing in society. The company's management system is not only concerned with shareholder rights but also the interests of society and the impact on the environment. Company activities that ignore environmental impacts will conflict with the norms and values prevailing in society. The adverse impact of environmental management by the company will be felt by the surrounding community both directly and indirectly. Therefore, companies must create a good environmental impact management system. Early management of environmental impacts by the company will reduce the risk for the company to get public demands in the future. For this reason, the company discloses the actions taken to reduce these environmental impacts. Disclosure is made by the company through the financial statements prepared by the company.

Intellectual Capital

Intellectual capital is defined as the total of all capabilities and knowledge that help a company to gain and maintain a competitive advantage. a company to gain and maintain a sustainable competitive advantage (Wang, Wang, & Liang, 2014). (Wang, Wang, & Liang, 2014). Intellectual capital is a resource that is intended to contribute to improving performance (Zéghal & Maaloul, 2010), intellectual capital information is more widely disclosed in company reports. Intellectual capital that is more widely disclosed in corporate reports should represent a source of competitive advantage and thus will lead to improved performance of the company. of the company. Intellectual capital has three components: human capital, which is based on human resources; structural capital, which relies on organizational human resources, structural capital that relies on the organization, and capital employed that is based on the coordination of the relationship between the company and its surrounding environment. based on the coordination of the relationship between the company and the surrounding environment (Jardon & Dasilva, 2017). According to Hussinki, Ritala, Vanhala, & Kianto (2017), companies characterized by high intellectual capital and the use of knowledge management practices. and high use of knowledge management practices usually have better performance.

Green Accounting

Green accounting is Environmental accounting is collecting, analyzing, assessing, and preparing reports on environmental and financial data with the aim of reducing environmental impacts and costs. This form of accounting is also important to many aspects of government policy. As a result, environmental accounting has become a key aspect of green business and responsible economic development” (Cohen and Robbins, 2011:190).

Company Performance

Performance measurement according to Anthony and Govindarajan (2007: 441) is the measurement of the results of strategy implementation, and performance results that are considered good will be the standard for measuring future performance. If the indicators that become performance measures increase, it means that the strategy has been implemented properly. According to Jumingan (2014: 239) explains that financial performance is a description of the company's financial condition in a certain period, both regarding aspects of raising funds and channeling funds, which are usually measured by indicators of capital adequacy, liquidity, and profitability..
The Effect of Intellectual Capital on Company Performance

The effect of human capital efficiency on company performance Human capital efficiency shows the amount of value added generated per monetary unit invested in labor to produce company performance. Human capital is the intellectual ability of employees. Nielsen, Bukh, Mouritsen, Johansen, & Gormsen (2006) argue that human capital, represented by for example the skills, knowledge, expertise of employees that help improve company performance. According to Soetedjo & Mursida (2014), the higher the human capital, the higher the company's performance because it will show the effective and efficient utilization and management of the intellectual resources of the company's workforce so as to obtain maximum profit. The results of Nimtrakoon's research (2017) state that human capital efficiency has a significant positive effect on company performance.

\[ H_1 = \text{Human capital efficiency has a significant positive effect on company performance.} \]

The effect of structural capital efficiency on company performance Structural capital efficiency is the proportion of the amount of added value accounted for by structural capital. Structural capital is the company's ability to assist employee efforts to produce ideal intellectual capital such as: company operating systems, manufacturing processes, organizational culture and management. According to Soetedjo & Mursida (2014), the higher the structural capital, the company's performance will increase because the company is able to manage its assets optimally because with a good system, structure and procedures, the company can reduce fraud that occurs and customer satisfaction can be increased and can also maximize profits. The results of Hamdan's research (2017), suggest that structural capital efficiency has a significant positive effect on the company's financial performance.

\[ H_2 = \text{Structural capital efficiency has a significant positive effect on company performance.} \]

The effect of capital employed efficiency on company performance Capital employed efficiency is the amount of added value of physical and financial assets in the company which measures the efficiency and effectiveness of the company. Capital employed comes from outside the company which can provide more value to companies such as clients, distributors, suppliers, and investors (Sawarjuwono & Kadir, 2003). According to Soetedjo & Mursida (2014), the higher the capital employed, the company's performance will increase because good social relations between the company and outsiders will affect the level of trust of outsiders in the company so that the company can get many benefits such as: client loyalty, good name and power to negotiate so that profit can be maximized. The results of Nimtrakoon's research (2017) state that capital employed efficiency has a significant positive effect on company performance.

\[ H_3 = \text{Capital employed efficiency has a significant positive effect on company performance.} \]

The Effect of Green Accounting on Company Performance

Green accounting for company owners has many benefits, one of which is that it can trigger positive developments and can improve the company's name in the eyes of the public. So that this can increase the company's selling value for its products produced by the company. Not only does it increase the company's selling value to consumers but also to investors who have invested their shares in the company. According to Ningsih (2017) in her research has explained that it has been found that green accounting has a significant positive effect on financial performance. As well as research from Adriana (2022) which shows the results of the application of green accounting can affect the company's financial performance. This is because environmental disclosures in the company's annual report can assist users of financial statements in making decisions for company policies or programs related to environmental preservation in the future. Based on the results of research by Nursasi (2017) and Adriana (2022), the researchers proposed the following hypothesis:

\[ H_4: \text{Green Accounting Affects Company Performance.} \]

RESEARCH METHODS

Population and Sample

The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. The sampling method in this study uses purposive sampling method, namely the sampling method based on certain criteria.

Operational Definition of Variables

Dependent Variable Financial Performance

The company's financial performance was chosen in this study because it is to see whether social responsibility activities for companies can have an impact on company profitability. Financial performance in this study is measured using ROA (Return On Asset). The formula used to measure this variable is as follows

\[ \text{ROA} = \frac{\text{Net Profits}}{\text{Total Asset}} \]
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Independent Variable of Intellectual Capital
The measurement of intellectual capital in this study is based on the main components of VAIC™, namely VAHU (Value Added Human Capital), STVA (Structural Capital Value Added) and VACA (Value Added Capital Employed). This formulation is the sum of the previously mentioned coefficients, namely VAIC™ (Value Added Intellectual Coefficient), which is a method of measuring intellectual capital components as follows:

\[ \text{Output} = \text{Revenue (products and services)} \]
\[ \text{Input} = \text{All expenses (except employee expenses)} \]
\[ \text{VA} = \text{Output} - \text{Input} \]
\[ \text{HC} = \text{Human capital (labor burden)} \]
\[ \text{SC} = \text{Structural capital (VA-HC)} \]
\[ \text{CE} = \text{Customer capital (equity and net profit)} \]
\[ \text{VAHU} = \frac{\text{VA}}{\text{HC}} \]
\[ \text{STVA} = \frac{\text{SC}}{\text{VA}} \]
\[ \text{VACA} = \frac{\text{VA}}{\text{CE}} \]
\[ \text{VAIC}™ = \text{VAHU} + \text{STVA} + \text{VACA} \]

Description:
\[ \text{VAIC}™ = \text{Value Added Intellectual Coefficient} \]
\[ \text{VAHU} = \text{Value Added Human Capital} \]
\[ \text{STVA} = \text{Structural Capital Value Added} \]
\[ \text{VACA} = \text{Value Added Capital Employed} \]

Independent Variable Green Accounting
Green accounting variables can be measured using the content analysis method. If the company has a prevention cost component, internal failure cost component, external failure cost and environmental development & research cost in the annual report, each indicator will be given a value of 1 so that the total score is 4. If there is no environmental cost component in the annual report, it will score 0 (Chasbiandani et al., 2019). After the score is determined, the amount of disclosure level is as follows:

\[ \text{Disclosure} = \frac{\text{number of fulfill disclosure}}{\text{maximum number}} \]

Analysis Method
Data The data analysis technique needed in this research is multiple regression analysis. The data collected was then analyzed using SPSS version 26 starting from descriptive statistical tests, classical assumption tests used are normality tests, multicollinearity tests, heteroscedasticity tests and autocorrelation tests and hypothesis testing.

RESULTS AND DISCUSSION
Description of Research Data
The population in this study were all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2020-2023. The sampling method in this study used purposive sampling method, which is a sampling method based on certain criteria. Table I shows that the samples that met the sampling criteria in this study were 40 companies with 137 observations.

Table I
<table>
<thead>
<tr>
<th>Research Sample</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing companies listed on the Indonesia Stock Exchange in 2020-2023</td>
<td>132</td>
</tr>
<tr>
<td>Not available complete annual reports during 2020-2023</td>
<td>(34)</td>
</tr>
<tr>
<td>Available consecutive complete annual report reports during 2020-2023</td>
<td>98</td>
</tr>
<tr>
<td>Does not have complete data related to the variables in the study</td>
<td>(58)</td>
</tr>
<tr>
<td>Number of sample companies</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Data processed 2023
Descriptive Statistics
Descriptive statistical data results are used to describe research data in the form of mean, minimum, maximum and standard deviation of each variable. This research data is described as follows:

Table 2
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Capital Efficiency (HC)</td>
<td>-0.73253</td>
<td>0.52670</td>
<td>0.02915</td>
<td>0.08619</td>
</tr>
<tr>
<td>Structural Capital Efficiency (SC)</td>
<td>-41.6561</td>
<td>65.7640</td>
<td>3.04922</td>
<td>4.37981</td>
</tr>
<tr>
<td>Capital Employed Efficiency (CE)</td>
<td>-0.59273</td>
<td>0.98273</td>
<td>0.15019</td>
<td>0.14231</td>
</tr>
<tr>
<td>Green Accounting (GA)</td>
<td>0.500000</td>
<td>1.000000</td>
<td>0.78333</td>
<td>0.21326</td>
</tr>
<tr>
<td>Company Performance (CP)</td>
<td>0.000000</td>
<td>1.25000</td>
<td>0.09000</td>
<td>0.17898</td>
</tr>
</tbody>
</table>

Source: Data processed 2023

Normality Test Results

Table 3
Data Normality Test Results

<table>
<thead>
<tr>
<th>Description</th>
<th>Asymp Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal distributed data</td>
<td>0.323</td>
</tr>
</tbody>
</table>

Source: Data processed 2023

Based on table 3, it can be seen that the results of the calculation using the One Sample Kolmogorov-Smirnov test for Unstandardized Residual have an Asymp Sig (2-tailed) value greater than 0.05 so that the data used in this study are normally distributed.

Multicollinearity Test Results

Table 4
Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Description</th>
<th>Tolerance</th>
<th>VIF</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicollinearity Free</td>
<td>0.569</td>
<td>1.758</td>
<td></td>
</tr>
<tr>
<td>Multicollinearity Free</td>
<td>0.623</td>
<td>1.465</td>
<td></td>
</tr>
<tr>
<td>Multicollinearity Free</td>
<td>0.721</td>
<td>1.575</td>
<td></td>
</tr>
<tr>
<td>Multicollinearity Free</td>
<td>0.735</td>
<td>1.360</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed 2023

Based on table 4 above, it is concluded that all research variables have VIF < 10 and Tolerance value > 0.10, which means that there are no symptoms of multicollinearity in the regression equation model.

Heteroscedasticity Test Results

Table 5
Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Description</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroscedasticity Free</td>
<td>0.065</td>
</tr>
<tr>
<td>Heteroscedasticity Free</td>
<td>0.075</td>
</tr>
<tr>
<td>Heteroscedasticity Free</td>
<td>0.054</td>
</tr>
<tr>
<td>Heteroscedasticity Free</td>
<td>0.081</td>
</tr>
</tbody>
</table>

Source: Data processed 2023

Based on Table 5, it can be concluded that there are no symptoms of heteroscedasticity in the research variables.
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Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefisient</th>
<th>t-test</th>
<th>Sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Capital Efficiency (HC)</td>
<td>0.840</td>
<td>2.111</td>
<td>0.039</td>
<td>Accept</td>
</tr>
<tr>
<td>Structural Capital Efficiency (SC)</td>
<td>0.721</td>
<td>2.123</td>
<td>0.035</td>
<td>Accept</td>
</tr>
<tr>
<td>Capital Employed Efficiency (CE)</td>
<td>0.726</td>
<td>2.121</td>
<td>0.036</td>
<td>Accept</td>
</tr>
<tr>
<td>Green Accounting (GA)</td>
<td>0.624</td>
<td>2.130</td>
<td>0.037</td>
<td>Accept</td>
</tr>
<tr>
<td>R Square</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.494</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>17.127</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed 2023

Based on the regression results in table 7, it can be seen that the F statistical value in the model is 17.127 with a significance value of 0.000. The probability value of 0.000 is smaller than 0.05, indicating that the model used in the study is feasible to use. Based on table 7, it can be seen that the value of Adj. R² value of 0.494 which indicates that 49.4% of the variable use of accounting information can be explained by the human capital efficiency (HC) variable. Variable Structural Capital Efficiency (SC), Variable Capital Employee Efficiency (CE) and variable green accounting (GA) while the remaining 50.6% is explained by other variables not contained in this study.

Pembahasan

The effect of human capital efficiency on company performance

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Green accounting affects company performance

Green accounting for company owners has many benefits, one of which is that it can trigger positive developments and can improve the company's name in the eyes of the public. So that this can increase the company's selling value for its products produced by the company. Not only does it increase the company's selling value to consumers but also to investors who have invested their shares in the company. Nursasi (2017), in his research has explained that it has been found that green accounting has a significant positive effect on financial performance. As well as research from Adriana (2022) which shows the results of the application of green accounting can affect the company's financial performance.
This is because environmental disclosures in the company's annual report can assist users of financial statements in making decisions for company policies or programs related to environmental conservation in the future.

CONCLUSIONS AND SUGGESTIONS

Conclusion
Based on the results of the research to determine the application of Intellectual Capital green accounting, and company performance with the Manufacturing Company that has been done, it can be concluded as follows:

- Physical capital (VACA), human capital (VAHU), structural capital (STVA) are significant components in forming Intellectual Capital in the company. Furthermore, Intellectual capital has a positive and significant effect on the financial performance of companies in the financial sector in Indonesia.

- Green accounting affects financial performance. The application of green accounting can affect the company's financial performance. This is because environmental disclosures in the company's annual report can assist users of financial statements in making decisions for company policies or programs related to environmental conservation in the future.

Suggestion
Based on the results of the conclusions described above, the following are things that can be used as academic advice and practical advice, namely:

- Academic advice. Further research can add other variables that can affect financial performance and add research objects and research periods.

- Practical advice. It is hoped that this research can be a consideration for investors so that in deciding on investments, they also consider the environmental responsibilities that have been carried out by the company, so that the company can be more concerned about increasing its environmental responsibility. Companies should also include the environment as a cost or asset in the annual report so that the financial information produced can be more efficient and get a positive image.

REFERENCES


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