Does Financial Performance As An Intervening Variable in Strengthening Market Value: Intellectual Capital Approach

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ABSTRACT

Purpose: This research aims to determine the effect of intellectual capital on market value with financial performance as an intervening variable.

Design/methodology/approach: This study uses quantitative methods, the population used in this study is mining companies listed on the Indonesia Stock Exchange, sampling techniques used are purposive sampling, sampling obtained 55 companies.

Findings: This study indicates that there is a relationship between the intellectual capital variable influences Return on Assets.

Research limitations/implications: The analysis technique used in this study is path analysis with the Smart PLS 3.0 program’s help. Intellectual capital influences market value. Intellectual capital affects the Asset Turn Over. Return on Assets does not affect market value. Asset Turn Over affects market value. This study concludes that Intellectual capital has no effect on market value with return on Asset as an intervening variable.

Practical implications: This study concludes that Intellectual capital has no effect on market value with return on Asset as an intervening variable. Intellectual capital does not affect market value with asset turn over as an intervening variable.

Originality/value: This paper is original.

Paper type: Research paper

Keyword: Asset Turn Over, Financial Performance, Intellectual Capital, Market Value, Return On Asset

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I. INTRODUCTION

In industry 4.0 companies must be able to transform their business from a workforce-based business to a knowledge-based business. In knowledge-based management system where intellectual capital becomes one of the production factors that must be developed in a company (Ozkan, 2016). By using a business based on knowledge, we can manage other resources appropriately so that the company can compete with competitors and the company has a competitive advantage that is not owned by other companies.

the company's indicators have achieved its objectives can be seen from the results of performance and market value in a company. One of the ways that companies can achieve good financial performance and market value is by increasing the value of intellectual capital (Akhavan et al., 2012). Intellectual capital is a concept that provides an overview of new knowledge-based resources and describes intangible assets, if the asset is used optimally allows the company to carry out its strategy effectively and efficiently (Hadiwiyaya & Rohman, 2013). Intellectual capital can be an added value of a company so as to increase investor confidence (Nuryaman, 2015).
Financial problems in a company is a very important problem and must be addressed immediately by a growing company, because the company succeeds in seeking profit and maintaining its profit depending on the financial performance of the company.

In Figure 1 it appears that there is a decline in Mineral mining products, this indicator indicates that the decline in products will result in investors selling the shares. This problem if left there will be a lot of shares that will be sold and this if left will lower the market value of the company with the people and friends there will be difficulty.

Economic change in this era with the main characteristics is knowledge science with the application of knowledge management (knowledge management) then the prosperity and welfare of a company will depend on the capitalization and knowledge. In knowledge-based management system where intellectual capital becomes one of the production factors that must be developed in a company (Ozkan, 2016). By using knowledge-based resources and technology, it can know how to manage other resources appropriately and provide high economic value, which can later bring companies able to compete.

Intellectual Capital is a concept that provides an overview of new knowledge-based resources and describes intangible assets, if the asset is used optimally allows the company to carry out its strategy effectively and efficiently (Hadiwijaya & Rohman, 2013). Intellectual capital can be an added value of a company so as to increase investor confidence (Nuryaman, 2015). In this case shows that the added value of a company can be created because of intellectual capital. With the intellectual capital of the company can increase the value of the company by improving the financial performance of the company.

The results of different research were obtained from research conducted by Kristanto, (2012) on the influence of VAIC on share prices through ROA on banking companies listed on the Indonesia Stock Exchange year 2008-2010. In this study it links Intellectual Capital with the share price. This is a new research as a development of intellectual capital's influence on financial performance which is then linked to the share price. In this study vaic variables as independent variables, stock prices as dependent variables, and ROA as intervening variables. The results of this study stated that SCVA has a negative influence on the share price either directly or through roa. While VAHU has no influence on the share price directly or indirectly. Different research results were also obtained from research conducted by (Nuryaman, 2015), which showed that intellectual capital positively affects the value of the company. Companies have intellectual capital will be greater resulting in higher financial performance.

The mining sector is a sector that supports economic development in a country, because of its role as a medium of energy resources that means a lot to a country. Although the mining sector is used as a medium for energy resources, but not all production of mining goods in this sector experienced good production growth, because based on the graph of mineral mining goods production there are some mining goods in this sector experienced a decrease in production.

The purpose of this research is for financial performance to be able to set intervening variables to increase market value through intellectual capital. This research is important to do because through this research it will be known whether financial performance becomes varaibael interning on intellectual capital relationships limited marker value. Kontibusi obtained in this research will provide information to the management of the company to understand how to increase the market value.
II. LITERATURE REVIEW

Resource Based View Theory (RBT) discusses the resources a company has and how it can develop a competitive advantage using its resources. To realize this, a company must have the ability to manage the resources owned by the company, so that the company can compete and be superior to the company's comparators. The resources referred to in this case are intellectual capital resources that include added value (VA), huma capital and

Stakeholder theory is a theory that explains the relationship between management and its stakeholders. In this theory a manager should be able to adjust performance with his stakeholders, it aims to maximize the value of the company's activities so as to minimize losses.

Stakeholders can be used as an important material in a company to increase consideration for a manager to disclose or not an information In the context of intellectual capital the stakeholders have their own interests that are important to influence management in the process of utilization of all potential owned by a company so as to cause the creation of value added value

Legitimacy theory is a theory that is closely related to stakeholder theory. This theory is very closely related to intellectual capital reporting, in which case the company is encouraged to show the capacity of intellectual capital in the financial reporting of intellectual capital wealth owned by it. Recognition of legitimacy is very important for a company because it is useful to maintain the existence of the company in a social environment (Chairunissa & Dewi, 2015). Intellectual Capital (IC) is an intangible asset such as human capital, processes and customers that can provide a competitive advantage for companies in the era of knowledge (Wijayani, 2017). Value Added Intellectual Coefficient is a method used to calculate the value creation of tangible assets and intangible assets in the company (Oliova & Hatane, 2015). In the Value Added Intellectual Coefficient (VAIC) model there are three components of the company that must be measured, namely Human Capital is a power of intellectual capital sourced from human beings owned by a company such as competent and committed employees (Wijaya, 2012). Structural Capital (SC) Structural Capital is everything that is not related to humans, but relates to databases, organizational structures, sets of processes and strategies (Wijaya, 2012).

Customer Capital relation capital is something related to customer loyalty, goodwill, supplier relations, relationships with the community, image, customer satisfaction, relationships with suppliers, relationships with shareholders and distribution channels (Hermawan, 2013).

The value of the company is the selling value of a company in the capital market which is seen based on the company's share price (Sirojudin & Nazaruddin, 2014). The company's market value in this study used Price Book to Value (PBV) proxy. The Price Book to Value illustrates how much the market values the book value of the stock. Financial performance is an analysis used to see the ability of a company in implementing the rules of financial implementation well (Fahmi, 2014), (Fahmi, 2017).

Intellectual Capital has an important role in increasing the return on assets in managing a company. If a company's intellectual capital is good then the return on assets in a company increases which can improve financial performance (Deep & PAL, 2014). This encourages investors to be interested and invest in a company based on the return on assets in the company. Intellectual capital is the main factor that can provide an increase in market value or a value (Soedaryono & Prihartini, 2012). This can be seen by the innovations made by humans (human capital) in creating a product so that it has a very high selling value that results in an increase in the value of a company.

The role of intellectual capital in improving Asset TurnOver is very important. Because the use of intellectual capital can increase the productivity of a company (Hermanus, 2013). This can be seen by increasing intellectual capital components such as VACA, VAHU and STVA that can increase employee productivity levels so as to increase Asset Turn Over.

The increasing return on assets of a company will result in an increase in the market value or market value of the company. In investing in stocks, investors have rational thinking (Soedaryono & Prihartini, 2012). This means that investors have a positive signal response in investing. Investors will invest in companies that are able to manage their assets well so as to generate high corporate value.

Assets Turn Over is directly proportional to the market value or value of the company. This means that the higher the value of Assets Turn Over, the better the value of the company (Rinnaya et al., 2016). In that case it means that if the value of the ATO increases then the company's value increases or the company's value becomes good in other words the company is in good shape. Effective management and use of intellectual capital is proven to increase the value of the company. Maximum resource management can increase the value of the company which will then increase the company's profit while generating profit for shareholders. Increasing the company's ability to manage asset levels in a company can increase a company's income level (Gani et al., 2020). This means that a company that is able to manage its assets well then the level of revenue of the company increases and causes an increase in the value.
III. RESEARCH METHODOLOGY

The type of data in this study is quantitative data. This research population is a mining company listed on the Indonesia Stock Exchange, the method of determining samples used in this study is the purposive sampling technique. The Company that is the selection must meet the criteria. The Company that meets the requirements desired by the researchers amounts to 55 sampling.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Formulas</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Book to Value</td>
<td>PBV illustrates how much the market rate is in respecting the book value in a company's shares</td>
<td>$\text{PBV} = \frac{\text{Share Price Per Share}}{\text{Book Value}}$</td>
<td>Rasio Pasar</td>
</tr>
<tr>
<td>Value added</td>
<td>Value added (VA) or value added is the difference between total sales (OUT) and input (IN)</td>
<td>$\text{VA} = \text{OUT} - \text{IN}$</td>
<td></td>
</tr>
<tr>
<td>Return On Assets</td>
<td>ROA is a ratio of net income to total assets used to measure returns on total assets after tax</td>
<td>$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$</td>
<td>Rasio Profitabilitas</td>
</tr>
<tr>
<td>Asset Trun Over</td>
<td>Asset Turn Over is also called total asset turover ratio. Asset Turn Over is used to see the extent to which all assets in the company are effectively</td>
<td>$\text{ATO} = \frac{\text{Sale}}{\text{Total assets}}$</td>
<td>Rasio Aktivitas</td>
</tr>
</tbody>
</table>

A. Data Collection Techniques

This study's data is in the form of financial statements and annual reports on companies going public from the Indonesia Stock Exchange through the website www.IDX.co.id. The data will collect in his analysis to solve the problem and then concluded. The initial analysis used is to analyze the several tests that are Outer model test, Inner Model Test. (Sirojudin & Nazaruddin, 2014)

IV. RESULTS AND DISCUSSION

a. Measurement Model Testing (Outer Model)
Outer model is done to assess the validity and reliability of the model.
1. Convergent Validity
The validity of a convergent relates to the principle that the manifest variables of a construct should be highly correlated. The Convergent Validity value is seen by comparing the outer loading factor value with its critical value. If the loading factor value >0.7 then the indicator is declared valid and vice versa. SmartPLS 3.0 output for loading factor values in this study gave the following results:

<table>
<thead>
<tr>
<th>Variable</th>
<th>MARKET VALUE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>PBV</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

Sumber : Pengolahan data dengan SmartPLS 3.0
Based on the convergent validity table the outer loading value is above 0.7. This means that all indicators in this study are declared valid.

Discriminant Validity

This value is a cross loading factor value that is useful to know if the construct has adequate discriminants. Discriminant Validity value is seen by comparing the loading value of the intended construct should be higher than the other constructs. SmartPLS 3.0 output for discriminant validity value in this study gave the following results:

<table>
<thead>
<tr>
<th></th>
<th>ATO</th>
<th>IC</th>
<th>MARKET VALUE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO</td>
<td>1.000</td>
<td>0.222</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>0.285</td>
<td>-</td>
<td>0.221</td>
<td>1.000</td>
</tr>
<tr>
<td>MARKET VALUE</td>
<td>0.164</td>
<td>-</td>
<td>0.082</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Sumber: Pengolahan data dengan SmartPLS 3.0

Based on discriminant validity table the intended loading value of the construct has a higher value than other constructs. This means that all indicators in this study are declared valid.

1) Composite reliability

Data that has a composite reliability value of > 0.7 means it has high reliability. SmartPLS 3.0 output for composit reliability value in this study gave the following results:

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO</td>
<td>1.000</td>
</tr>
<tr>
<td>IC</td>
<td>1.000</td>
</tr>
<tr>
<td>MARKET VALUE</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Sumber: Pengolahan data dengan SmartPLS 3.0

Based on the Composite Reliability table all constructs have a value above 0.7 which is 1,000. This means that all constructs for all criteria in this study have a high reliability value

1) Average Variance Extracted (AVE)

Nilai Average Variance Extracted (AVE) yang diharapkan dalam model ini adalah > 0,5. Output SmartPLS 3.0 untuk nilai AVE dalam penelitian ini memberikan hasil sebagai berikut:

<table>
<thead>
<tr>
<th></th>
<th>AVE Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO</td>
<td>1.000</td>
</tr>
<tr>
<td>IC</td>
<td>1.000</td>
</tr>
<tr>
<td>MARKET VALUE</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Sumber: Pengolahan data dengan SmartPLS 3.0

Based on the AVE table the value of all constructs in this study is above 0.5 which is 1,000.

2) Cronbach alpha

Reliability tests are conducted to prove the accuracy, consistency and accuracy of the instrument in measuring the construct. The expected alpha Cronbach value in this model is >0.6 for all constructs. SmartPLS 3.0 output for Cronbach's Alpha value in this study provided the following results:
Tabel 6. Hasil Cronbach’s Alpha

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO</td>
<td>1.000</td>
</tr>
<tr>
<td>IC</td>
<td>1.000</td>
</tr>
<tr>
<td>MARKET VALUE</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Sumber: Pengolahan data dengan SmartPLS 3.0

Based on Cronbach’s alpha table the value of all constructs in this study is above 0.6 which is 1.000.

A. Inner Model Measurement

The structural model (Inner Model) aims to differentiating the relationship between exogenous variables and endogenous variables. Inner model testing uses coefficient path by looking at T-Statistics values and latent variable P-Values values. The research hypothesis can be accepted if the T-Statistics > 1.96 and the P-Values < 0.05 [21]

The following are the results of hypothesis testing directly obtained from SmartPLS in this study through coefficient path:

Tabel 7. Hasil Pegujian Coefficient Path

|                        | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|------------------------|---------------------|-----------------|-----------------------------|---------------------|----------|
| ATO -> MARKET VALUE    | 0.362               | 0.361           | 0.153                       | 2.374               | 0.018    |
| IC -> ATO              | 0.222               | 0.233           | 0.088                       | 2.525               | 0.012    |
| IC -> MARKET VALUE     | -0.312              | -0.307          | 0.066                       | 4.730               | 0.000    |
| IC -> ROA              | -0.223              | -0.223          | 0.075                       | 2.957               | 0.003    |
| ROA -> MARKET VALUE    | -0.047              | -0.038          | 0.096                       | 0.489               | 0.625    |

Sumber: Pengolahan data dengan SmartPLS 3.0

Intellectual capital relationship with ROA has a t-statistic value of >1.96 of 2.957 and a p-value of <0.05 of 0.003. In this case the first hypothesis is “accepted” and intellectual capital affects roa. Intellectual capital relationship with market value has a t-statistic value of >1.96 which is 4.730 and p-value <0.05 which is 0.000. In this case the second hypothesis is "accepted" and intellectual capital affects the market value. ROA relationship with market value has a t-statistic value of <1.96 which is 0.489 and p-value >0.05 which is 0.625. In this case the fourth hypothesis is "rejected" and the ROA has no effect on market value. The ATO’s relationship with...
market value has a t-statistic value of >1.96 of 2.374 and a p-value of <0.05 of 0.018. In this case the fifth hypothesis is "accepted" and the ATO has an effect on market value

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<table>
<thead>
<tr>
<th>IC -&gt; ATO -&gt; MARKET VALUE</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T (O/STDEV)</th>
<th>Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC -&gt; ATO -&gt; MARKET VALUE</td>
<td>0.080</td>
<td>0.083</td>
<td>0.047</td>
<td>1.727</td>
<td>0.085</td>
<td></td>
</tr>
<tr>
<td>IC -&gt; ROA -&gt; MARKET VALUE</td>
<td>0.010</td>
<td>0.008</td>
<td>0.023</td>
<td>0.459</td>
<td>0.646</td>
<td></td>
</tr>
</tbody>
</table>

Sumber : Pengolahan data dengan SmartPLS 3.0

The relationship between intellectual capital and market value through ATO as an intervening variable has a t-statistic value of <1.96, which is 1.727, and a p-value of >0.05, which is 0.085. In this case, the seventh hypothesis is "rejected" and intellectual capital does not affect market value through ATO as an intervening variable. .05 which is equal to 0.646. In this case, the sixth hypothesis is "rejected" and intellectual capital does not affect market value through ROA as an intervening variable. The relationship between intellectual capital and ATO has a t-statistic value > 1.96, which is 2.525, and a p-value <0.05, which is 0.012. In this case, the third hypothesis is "accepted" and intellectual capital affects ATO

a. Discussion

1. The relationship between

This shows that the company can manage intellectual capital well so that the company can increase ROA. This is in accordance with the Research-Based Theory (RBT), which states that a company must be able to manage its resources properly. In this case, the resources in question are intellectual resources, including VA, HC, and SC. The results of the study are in line with research conducted by (Ranani & Bijani, 2014), (Deep & PAL, 2014), (Soedaryono & Prihartini, 2012), (Wijayani, 2017), and (Chairunissa & Dewi, 2015) which explains that Intellectual capital has a positive effect on Return on Assets.

The relationship between

This shows that the company can innovate well so that the company can increase market value. In this case, the company can innovate and be able to compete in the global market, so that the market value increases. Stakeholder theory states that all company activities are in the creation of value creation. To create added value, the company must be able to increase the potential of the company's human capital, structural capital, and physical capital.

The results of the study are in line with research conducted by (Nuryaman, 2015), (Soedaryono & Prihartini, 2012), and (Simarmata & Subowo, 2016) which state that intellectual capital affects market value.

The relationship between

This shows that the company is able to use resources well so that the company's productivity increases. Research-Based Theory (RBT) explains that knowledge-based resources such as intellectual capital which includes VACA, VAHU, and STVA are very important for companies, because the three components are very closely related. Because to improve employee performance these three components must coordinate with each other.

The results of this study are in line with research conducted by(Nurhayati, 2017), (Gani et al., 2020) and (SW & Firmanasyah, 2012) which resulted that intellectual capital had an effect on Asset Turn Over.

The relationship between

ROA has no effect on market value because ROA is inversely proportional to firm value. In this case, investors do not see investments based on ROA, but investors see based on ROE, liquidity, and GCG. For investors, the most important thing is to look at financial performance based on the company's stock price.

The results of this study are in line with research conducted by (Hermawan & Mafulah, 2014) and (Iswara et al., 2018), which state that ROA has no effect on firm value. Asset Turn Over has an effect on market value which indicates that managers are able to rotate assets properly, causing the company to use very small debt in financing production sales and can minimize losses that cause company value to increase.

The results of this study are in line with research conducted by (Rinmay et al., 2016) and (Utami & Prasetiono, 2016) which state that Total Asset Turn Over has an effect on firm value.
The relationship between

The direct effect of intellectual capital on market value is stronger than the indirect effect mediated by ROA. Because the role of intellectual capital is very important to market value. Effective management and use of intellectual capital have proven to be able to increase firm value.

Resource-Based Theory states that the company's ability to manage its resources properly can create competitive advantage so that it can create value for the company.

The results of this study are in line with research conducted by (Isvara et al., 2018) and (Fitriyani, 2018) which state that ROA is not able to mediate the relationship between intellectual capital and market value.

The relationship between

In this case, it means that intellectual capital only has a direct effect on the mock value. The role of intellectual capital in increasing market value is very important for the company. In this case, intellectual capital is able to increase the value of the company so that it can attract the attention of investors. Ownership and utilization of intellectual resources enable companies to achieve competitive advantage and increase value-added.

The results of this study are not in accordance with research conducted by (Wany, 2010), which states that intellectual capital can mediate the relationship between intellectual capital and market value. The difference in the results of this study is because the role of intellectual capital for mining companies is very important to increase the value of the company so that it can create added value for mining companies.

REFERENCES


