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ARTICLE INFO

Keywords:
Intellectual capital
Value-added
Investment
Manufacture
Management

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All authors have reviewed and approved the final version of the manuscript.

https://doi.org/10.37275/OAIJSS.v5i2.111

ABSTRACT

The concept of intellectual capital has a goal that leads to the control and management of the company (Mouritsen et al., 2001) with the perspective of improving organizational performance, creating a competitive advantage of the company (Khalique et al., 2011) which can differentiate itself from competitors in today's modern economic era (Bhasin, 2008) which also leads to long-term profits (Jordão & de Almeida, 2017). The measurement of the impact of intellectual capital management that is most widely used is developed by (Pulic, 1998), VAIC™ (Value Added Intellectual Coefficient) to measure the extent to which the company generates an added value based on the efficiency of intellectual capital that is supported and influenced by the relationship between value-added to physical capital, human capital and structural capital. This research is causal research that aims to analyze the causal relationship between the independent variable and the dependent variable. The independent variable in this study is intellectual capital as measured by the Value-Added Intellectual Coefficient (VAIC™) which is the sum of three influential resources, namely Value-Added Human Capital (VAHU), Value Added Capital Employee (VACA), and Structural Capital Value Added (STVA). The dependent variable in this study is the company's performance as measured by Return on Assets (ROA), company growth is measured by Growth Revenue, and company value is measured by Tobin's Q. Based on the results of the study, it can be concluded that intellectual capital has no significant positive effect on the company's financial performance. manufacturing on the Indonesia Stock Exchange in 2016-2019, because the manufacturing industry is included in the category of low-IC intensive industries (not dense intellectual capital) where operational activities are still dominated by the use of many fixed assets compared to intellectual capital and initial management of intellectual capital which is still considered as costs and have not shown results that affect the company's financial performance.

1. Introduction

Manufacturing is one of the industries that experienced an increase in revenue for five years from 2016-to 2018 with a percentage increase of 23.89%, 31.06%, and 34.30% (in companies with an output value of 50 billion) with efficient use of sources in 2018 increased by 0.54% from the previous 0.51% (BPS, 2020). In addition, data from (Ministry of Industry, 2019) shows that in this industry, the realization of investment in this sector increased during the 2015-first semester of 2019 and recorded a cumulative total investment of Rp. 1,173.5 Trillion which indicates that the value of this manufacturing industry company is attractive. investors' interest in investing. These data indicate that in the manufacturing industry there is an increase in income growth, efficiency in managing resources so
that it has a company value that attracts investors to invest in the industry. One of the factors that can affect these three things is value-added, where value-added aims to improve performance so that it affects productivity which can increase company income (Ekwe, 2013). In addition, value-added can also increase the value of the company (Setiawan & Prawira, 2018) so that it attracts investors to invest (Sayyidah & Saifi, 2017). This is also supported by data from (BPS, 2020) which shows that the manufacturing industry also has an increase in value-added during 2016-2018. The concept of intellectual capital or intellectual capital has a goal that leads to the control and management of the company (Mouritsen et al., 2001) with a perspective to improve organizational performance, create a competitive advantage for the company (Khalique et al., 2011) that can distinguish itself from other competitors. Competitors in the current modern economic era (Bhasin, 2008) which also leads to long-term profits (Jordão & de Almeida, 2017). The measurement of the impact of intellectual capital management that is most widely used is developed by (Pulic, 1998), VAICTM (Value Added Intellectual Coefficient) to measure the extent to which the company generates an added value based on the efficiency of intellectual capital that is supported and influenced by the relationship between value-added to physical capital, human capital and structural capital (Ulum, 2013). In the management of intellectual capital (physical and intellectual resources), the company is expected to experience growth in terms of income by using existing resources (Coad, 2013). One of the measurements used to measure income growth is growing revenue, which is used to assess the level of income in a certain period for which the results lead to value creation to have a competitive advantage (Ghosh et al., 2005). The appropriate and appropriate management of intellectual capital will also affect the value of the company (Giovanni & Santosa, 2020). Where investors have confidence that the company's success rate can be reflected in the stock price (Ahmad et al., 2015). Companies that can manage Intellectual capital maximally can show that they have better performance so that it will encourage investors to buy shares which will later affect the movement of stock prices which is one of the factors to increase the value of the company and market confidence in the current performance and prospects of the company in the future. (Firdausi & Ludfi, 2018). Tobin's Q (Tobin, 1969) is one of the measurements used to evaluate the value of the company, wherein this measurement the value of the company can be analyzed from financial statements and market values, which can indicate management performance in managing the company (Azaro et al., 2020) and can also be the best information to assess the company (Risnaningish et al., 2020).

In its implementation, the impact of intellectual capital management has varied results, where (Zéghal & Maaloul, 2010), (Kamal et al., 2012), (Zehri et al., 2013) reveal that intellectual capital has a positive influence on financial performance. In addition, (Chen et al., 2005) argue that Intellectual capital not only has a positive influence on financial performance but also on revenue growth. Meanwhile, research from Indrastuti et al., 2020 argues that intellectual capital has a negative influence on financial performance. (Maditinos et al., 2011) and (Khanqah et al., 2012) state that the implementation of intellectual capital does not affect financial performance and income growth. (Susanti et al., 2020) also agree with this, that intellectual capital does not contribute to improving financial performance, but has a positive effect on company value. The relationship between intellectual capital and company value was also stated by (Tseng & Goo, 2005) and (Hejazi et al., 2016) where the implementation of intellectual capital has a positive effect on increasing company value. However, research from (Subaida et al., 2018) contradicts their results, where intellectual capital does not have an impact on increasing the value of the company.
2. Literature Review

Intellectual capital is a valuable resource for the company's competitive advantage and contributes to the company's performance (Bintang & Yudhanti, 2010). According to (Baroroh, 2013), the survival of the company and the company's financial performance are not only generated by the company's tangible assets (tangible assets) but what is more important is the existence of intangible assets in the form of human resources (HR) which are part of intellectual property. The capital which aims to manage company assets, to create competitive advantages that are important for the growth, prosperity, and sustainability of companies in the knowledge-based economy era. Intellectual Capital's relationship to financial performance can be measured by profitability ratios. One of the profitability ratios that can be used is ROA (Return On Assets), to see whether intellectual capital has contributed to financial performance in terms of asset utilization and the efficiency of asset use in the company's business processes (Yovita & Amrania, 2018).

Revenue growth aims to find out how fast the company grows and develops and to see how much the company's income increases from time to time (Pmudita, 2012). One indicator that affects income growth is intellectual capital (Oko et al., 2018). When intellectual capital has been managed optimally, it is expected that the company will experience high productivity which results in increasing revenue (Ekwe, 2013). To see whether the management of intellectual capital has been managed optimally, it can use the measurement of income growth with Growth Revenue (Mawarsih, 2016).

Intellectual capital can provide an overview of the company's future capabilities both to investors and stakeholders (Josephine et al., 2019). One of the measures used by investors and stakeholders in making decisions within the company is company value (Subaida et al., 2018). The value of the company is reflected in the value-added and returns obtained from the utilization of intellectual capital (Faza & Hidayah, 2014). Intellectual capital has a role to create company value and increase it. So that it can attract investors interested in seeking information about the ownership and management of the company to invest (Devi, 2017). By using Tobin's Q, it can measure whether the use of intellectual capital can increase the value of the company which can attract the attention of investors to invest in the company (Nafiroh & Nahumury, 2017).

3. Methods

This research is causal research that aims to analyze the causal relationship between the independent variable and the dependent variable. The independent variable in this study is intellectual capital as measured by the Value-Added Intellectual Coefficient (VAIC™) which is the sum of three influential resources, namely Value Added Human Capital (VAHU), Value Added Capital Employee (VACA), and Structural Capital Value Added (STVA). The dependent variable in this study is company performance as measured by Return on Assets (ROA), company growth is measured by Growth Revenue, and company value is measured by Tobin's Q. The unit of analysis used in this study is the financial statements of manufacturing companies listed on the Indonesia Stock Exchange. 2016-2019 years. The population of this study is 170 manufacturing companies listed on the Indonesia Stock Exchange during 2016-2019. The data is sourced from the company's audited financial statements which are downloaded on the Indonesia Stock Exchange. The number of samples obtained was 61 manufacturing companies during the 2016-2019 period, by purposive sampling.

The data analysis performed in this study is simple linear regression analysis. The goal is to determine the effect of a variable on other variables. This method is used with the consideration that the independent variable used is one variable, and the dependent variable used is three variables. How
much influence the independent variable (independent), namely intellectual capital, is tied to the dependent variable (dependent), namely financial performance ($Y_1 = a+bX$). How big is the influence of the independent variable (independent), namely intellectual capital is tied to the dependent variable (dependent), namely income growth ($Y_2 = a+bX$). How big is the influence of the independent variable (independent), namely intellectual capital is tied to the variable (dependent) namely company value ($Y_3 = a+bX$) where: $Y_1 =$ financial performance, $Y_2 =$ income growth, $Y_3 =$ company value, $X =$ intellectual capital, $a =$ constant, $b =$ intellectual capital regression coefficient. In addition, the classical assumption test was carried out by testing for normality, autocorrelation, heteroscedasticity to provide certainty that the data to be tested was unbiased and consistent. Furthermore, the research hypothesis was tested with the product-moment correlation test, the coefficient of determination test ($R^2$), and the $t$-test (partial test).

4. Results

Table 1 shows an overview of the values of each test variable. the Intellectual Capital ($X$) variable, the lowest value is -11.49252 while the highest value is 247.42107. The average obtained for the Intellectual Capital ($X$) variable is 13.1489338 with a standard deviation of 21.96110873. Financial Performance Variable ($Y_1$), the lowest value is 0.00107 while the highest value is 14.49665. The average obtained on the variable Financial Performance ($Y_1$) is 0.1704629 with a standard deviation of 0.9276443. Income Growth Variable ($Y_2$), the lowest value is 0.00132 while the highest value is 10.97843. The average obtained on the variable Revenue Growth ($Y_2$) is 1.1129881 with a standard deviation of 0.6568388. Company Value Variable ($Y_3$), the lowest value is 0.17692 while the highest value is 378,87465. The average obtained on the variable Company value ($Y_3$) is 3.5311573 with a standard deviation of 24.3022247.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Capital ($X$)</td>
<td>13.14±21.96</td>
</tr>
<tr>
<td>Company Performance ($Y_1$)</td>
<td>0.17±0.93</td>
</tr>
<tr>
<td>Company Growth ($Y_2$)</td>
<td>1.11±0.66</td>
</tr>
<tr>
<td>Company Value ($Y_3$)</td>
<td>3.53±24.31</td>
</tr>
</tbody>
</table>

The regression form of the first to third hypothesis experienced problems, namely when testing the classical assumption of normality, where the results were that the data were not normally distributed. After correcting the data by removing outlier data, for the first and second hypotheses, the results were that the data was normally distributed while the third hypothesis was still not normally distributed. However, because the observation data is greater than 30, it is assumed that normality has been fulfilled.

Hypothesis test analysis was conducted on the variables. The value of the correlation coefficient ($R$) is 0.075. The value is then interpreted based on the existing criteria, the correlation coefficient of 0.075 indicates a very low relationship between the Intellectual Capital ($X$) variable and the Financial Performance variable ($Y_1$). The coefficient of determination is 0.6%, which means that Intellectual Capital ($X$) has an influence of 0.6% on Financial Performance ($Y_1$), while the remaining 99.4% is influenced by other factors not observed in this study. The value of the arithmetic variable Intellectual Capital ($X$) is in the area of acceptance $H_0$ ($1.022 <
1.653). In addition, when compared with the level of significance, the value of Sig. obtained, which is 0.308, which is greater than 0.05 (0.308>0.05) based on the two bases for making these decisions, it is decided that H0 is accepted and H1 is rejected, meaning that Intellectual Capital (X) has no positive and significant effect on Financial Performance (Y_1) at manufacturing companies on the Indonesia Stock Exchange in 2016-2019. The value of the correlation coefficient (R) is 0.081. This value is then interpreted based on existing criteria, namely the existence of a very low relationship between the Intellectual Capital (X) variable and the Income Growth variable (Y_2). The coefficient of determination is 0.7%, which means that Intellectual Capital (X) has an influence of 0.7% on Income Growth (Y_2), while the remaining 99.3% is influenced by other factors not observed in this study. The value of t arithmetic variable Intellectual Capital (X) is in the area of acceptance H_0 (-1.168 < 1.652). In addition, when compared to the level of significance, the value of Sig. 0.244 is greater than 0.05 (0.244>0.05) based on the decision, it is decided that H0 is accepted and H1 is rejected, meaning that Intellectual Capital (X) has no positive and significant effect on Income Growth (Y_2). The value of the correlation coefficient (R) is 0.028. The value is then interpreted based on the existing criteria, the correlation coefficient of 0.028 indicates a very low relationship between the Intellectual Capital (X) variable Company Value variable (Y_3). The coefficient of determination is 0.1% which indicates that Intellectual Capital (X) has an influence of 0.1% on Company Value (Y_3), while the remaining 99.99% is influenced by other factors not observed in this study. The value of t arithmetic variable Intellectual Capital (X) is in the area of acceptance H_0 (0.401< 1.652). In addition, when compared with the level of significance, the value of Sig. 0.689 is greater than 0.05 (0.689>0.05). Based on the two bases for making these decisions, the decision was taken that H0 is accepted and H1 is rejected, meaning that Intellectual Capital (X) has no positive and significant effect on Company Value (Y_3).

5. Discussion

The results of the study show that intellectual capital has no significant positive effect on financial performance. This supports research from (Maditinos et al., 2011) and (Khanqah et al., 2012). This shows that intellectual capital has no significant positive effect on financial performance. Two factors allow intellectual capital not to have a significant positive effect on financial performance, namely the first factor, the manufacturing industry is included in the category of low-IC intensive industries (not dense intellectual capital) (Pramesh, 2016), where operational activities are still dominated by the use of many assets, still compared to intellectual capital (Kurjan & Syarifuddin, 2009). The second factor is the initial management of intellectual capital which is still considered a cost and has not shown results that affect the company's financial performance. In the early stages of its development, intellectual capital can be part of the expense (Wang, 2011) so that intellectual capital has not been able to support the company's financial performance (Gloet & Terziovski, 2004). When intellectual capital is still considered a cost, it can reduce net income which also causes the company's financial performance to decline (Benten, 2012).

The results of the study show that intellectual capital has no significant positive effect on income growth. This supports the results of research from (Maditinos et al., 2011), (Khanqah et al., 2012), and (Utama & Mirhard, 2016) which show that intellectual capital does not have a significant positive effect on income growth because the manufacturing industry is included in the low category. -IC intensive industries (not dense intellectual capital) (Pramesh, 2016), so that the management of intellectual capital elements in manufacturing companies is not evenly distributed. The characteristics of the manufacturing industry are still dominated by machines in business operations.
It will be effective if it is supported by technology (modern machines) it will affect the increase in productivity which can have an impact on increasing income. In addition, proper management of human resources can support the increase in income. So when all three are managed effectively, it will have an impact on revenue growth. (Tarigan et al., 2019).

The results of the study show that intellectual capital has no significant positive effect on company value. This is supported by the results of research from (Subaida et al., 2018) and (Simorangkir, 2021) because information related to intellectual capital is still not a priority for investors. Investors are still concerned with information related to company profits. This is because intellectual capital is an internal factor of the company which has a limited influence on the stock. In Indonesia, the behavior of investors in Indonesia generally prefers short-term profits over potential long-term profits (Djamil et al., 2013). Thus, the market is more sentimental towards stock prices than overall fundamental analysis, for example, only seeing the company’s financial performance declining, investors may not be too happy and market value will decrease (Tarigan et al., 2019).

The limitation of this research is that the research period is short, while intellectual capital is a long-term strategy, so research on the positive influence or impact of intellectual capital on financial performance, revenue growth, and company value has yet to be proven.

6. Conclusion

Intellectual capital does not have a significant positive effect on the financial performance of manufacturing companies on the Indonesia Stock Exchange in 2016-2019, because the manufacturing industry is included in the category of low-IC intensive industries (not dense intellectual capital), where operational activities are still dominated by the use of many fixed assets compared to with intellectual capital and initial management of intellectual capital which is still considered a cost and has not shown results that affect the company's financial performance. Intellectual capital does not have a significant positive effect on the Company's Revenue Growth in manufacturing companies on the Indonesia Stock Exchange in 20160-2019, because the manufacturing industry is included in the category of low-IC intensive industries (not dense intellectual capital), so that the management of the elements of intellectual capital in the company manufacturing is uneven. Intellectual capital does not have a significant positive effect on company value in manufacturing companies on the Indonesia Stock Exchange in 20160-2019, because information related to intellectual capital is still not a priority for investors where the behavior of investors in Indonesia generally prefers short-term profits over potential long-term profits. thus making the market more sentimental towards stock prices than the overall fundamental analysis.

7. References


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