THE EFFECT OF INSTITUTIONAL OWNERSHIP, INTELLECTUAL CAPITAL, AND COMPANY SIZE TOWARDS COMPANY VALUE

Muhammad Wafiyudin¹, Bima Cinintya Pratama²
Azmi Fitriani³ dan Erny Rachmawati⁴
Faculty of Economics and Business, Universitas Muhammadiyah Purwokerto
m.wafi99@gmail.com¹, bimacinintyaapratama@ump.ac.id²
azmifitriati.ump@gmail.com³, ernyrachmawati67@gmail.com⁴

Abstract: This study examines intellectual capital, institutional ownership, and company size effects towards firm value. The sample of this study is coal mining companies during 2016-2018 based on IDX data. Purposive sampling technique is used to take a total sample of 54 observations. Multiple regression analysis using SPSS program is used as data analysis technique. The results of this study indicate that intellectual capital and company size has no effect towards company value, while institutional ownership has a positive effect towards company value.

Keywords: intellectual capital, institutional ownership, company size, company value.

1. Introduction

Background

The marvel of intellectual capital (IC) in Indonesia, started to grow, particularly after the development of PSAK No. 19 (updated 2000) concerning intangible assets, in spite of the fact that not unequivocally expressed as intellectual capital, they got less consideration (Ulum, Ghozali and Chariri, 2008). Pulic (2004) recommends an elective estimation of intellectual capital by estimating the organization's intellectual capacities to create value added. It is called VAIC (Value Added Intellectual Coefficient) which consists of Capital Employed (CE), Human Capital Efficiency(HCE) and Structural Capital Efficiency(SCE).

Tarjo (2008) explained that institutional ownership is company shares owned by institutions (insurance companies, pension funds, or other companies). Institutional ownership, as the monitoring party use the debt in the capital structure to minimize agency costs. Agency costs are costs associated with management supervision to ensure that management acts consistently in accordance with the company's contractual agreements with creditors and shareholders (Horne and Wachiwicz, 1998: 482). Sofyaningsih and Pancawati (2011) say that institutional investors in a company will cause the distribution of shares to be more widespread, which in turn encourages more optimal supervision of management performance so as to maximize company value.

Intellectual capital have important role in increasing company value. Companies or Firms that utilizing its intellectual capital will lead to increase in market value. Chen et al, (2005) expressed that investors will give higher incentive to organizations that have higher intellectual resources than organizations that have low intellectual resources. This is in accordance with the opinion of
Appuhami (2007) which expresses that the more noteworthy the estimation of intellectual capital the more proficient the utilization of organization capital is, hence making included an incentive for the organization. Abidin (2000) additionally expresses that market value happens because of the incorporation of the idea of intellectual capital which is the primary factor that can expand the value of an organization.

Firm size can also affect firm value. Large companies already have a plus for company value because for investors, large companies have good prospects.

The large size of an organization shows that the organization is growing so investors will react in positive way and will improve the organization value. Damayanti and Achyani (2006) in Rinawati and Paulus (2011) express that size is reflected by the organization's total assets. Organizations that have large total assets shows that the organization is moderately more steady and more ready to create profits than organizations with small total assets.

This research focuses on coal mining companies on the Stock Exchange in 2016-2018. This research tries to contribute to the company as a consideration in making policies to better utilize intellectual capital in the company's financial statements. The purpose of this study is to determine the positive effect of institutional ownership, intellectual capital, and company size on the company's financial performance.

2. Literature Review

Resource-Based Theory

As per Barney's (1991) perspective on Resource-Based Theory, the organization will dominate in business rivalry and get great performance by claiming, controlling and using strategic asset (tangible and intangible assets). Belkaoui (2003) states that a possible strategy to improve organization performance is to consolidate tangible and intangible assets. Resource-Based Theory is an idea that creates in competitive advantage, which beliefs that an organization will accomplish greatness it it can utilize its resources (Wijaya, 2017).

RBT theory sees organizations as an assortment of assets and capacities. Contrasts in assets and the capacity of organizations with contenders will give competitive advantage (Kozlenkova et.al 2014). The organization's capacity to deal with its assets appropriately can make competitive advantage in order to make a value for the organization. So the assumption in this theory is the manner by which organizations can rival different organizations to increase competitive advantage by dealing with their assets as per the organization's abilities. As per Resource-Based Theory, IC is an asset as information accessible to organizations that will eventually carry future benefits to the organization, where such knowledge will become IC if it is created, maintained, transformed and managed well (Widiyaningrum, 2014).

Signalling Theory

Signaling Theory is basically concerned with decreasing information asymmetry between two parties (Arkelof, 1970).

Information asymmetry is then evolved in the sign equalization model which shows that information asymmetry can be diminished if the parties that has the information can impart a sign to related parties. A sign can be a detectable activity, or a perceptible structure, which is utilized to
show the hidden attributes (or characterestic) of the signaler. Signaling theory states that high-quality companies will tend to signal their excellence to the market through published information (Spence, 1973). According to (Jogi, et.al., 2013), published information can be utilized as a sign to investors in settling on decision.

On one hand, the sign will make investors and stakeholders increment the value of the organization, and afterward settle on decision that are more profitable for the organization (Whiting and Miller, 2008). Conversely companies with not too good capacity will tend to disclose mandatory information. Signaling theory gives a premise to anticipating how the stock market value will respond (Bergh and Gibbons, 2011). Signaling theory recommends that great organizations must give a sign of greatness to the market. The importance of information signals because information presents the things that happened in the company both in the past, present, and to predict the future. In addition, the information is also important to know the market shares owned (Kezia, 2019).

The Effect of Institutional Ownership on Company Value

Institutional ownership is company share ownership by institutions. In addition Institutional ownership is also defined as the percentage of shares owned by institutions, such as investment companies, banks, insurance companies, and other companies. The results of the study of Moh'd, et.al (1998) ownership of most shares by institutions plays an important role that institutions as outsider ownership can monitor and control the behavior of managers more effectively, so that managers will act more carefully in decision making and always try to be able to improve decisions and always try to be able to increase the value of the company. Then the first hypothesis to be tested in this study is as follows:

H1 : Institutional ownership has a positive effect on company value

The Effect of IC on Company Value

IC can be viewed as information, in the arrangement of intellectual property and experience that can be utilized to make wealth (Stewart, 1997). IC additionally incorporates all the knowledge on employees, organizations and their capacity to make value added that can upgrade competitive advantage (Barokah, 2018). IC has been recognized as a lot of intangible assets specifically resources, capacities and skills that drive performance and value creation (Fariana, 2014). On this basis, the hypotheses proposed are as follows:

H2 : IC has a positive effect on company value

The Effect of Company Size on Company Value

Company size is one indication of measuring a company's performance. The large size of the company can reflect if the company has a high commitment to continue to improve its performance Sugiarti, (2016). Investors expect the size of the organization can impact the value of the organization. Since the bigger the organization the simpler the organization is regarding financing by the both investors and creditors. In the interim, Maryam (2014) states that organization size positively affects firm value. Those the hypothesis could be stated as follows:
H3: Company size has a positive effect on firm company value.

3. Methods

Operational Definitions and Measurement Variables

Company Values Projected with Tobin's-Q

As indicated by Indri Handayani (2015) the value of the organization is the investor's view of the organization that is regularly related with stock prices. Tobin's-Q value can also be calculated as follows (Fadlun, 2016).

\[
\text{Tobin's - Q} = \frac{\text{Equity Market Value} + \text{Total Debt}}{\text{Equity Book Value} + \text{Total Debt}}
\]

Independent Variable

Institutional Ownership

Institutional ownership can be interpreted as a percentage of shares possessed by institutions, for example, investment companies, banks, insurance companies, and other companies. Institutional ownership is estimated by the total shares claimed by the institutions against the all out extraordinary offers (Fuad, 2005). Then the formula used for institutional ownership is:

\[
K_I = \frac{\text{Number of shares owned by the Institution}}{\text{Number of Shares Outstanding Year – End}}
\]

Intellectual Capital

IC (represented by VAIC). IC is measured using VAIC, which was developed by Pulic (2000; 2004). VAIC is calculated by:

\[
\text{VAIC} = \text{HCE} + \text{SCE} + \text{CEE}
\]

Information:

VAIC : Value added intellectual coefficient
HCE : VA / HC: coefficient of efficiency of human capital
SCE : SC / VA: coefficient of structural capital efficiency
CEE : VA / CE: capital uses efficiency coefficients
VA : OUT - IN = OP + EC + D + A
VA : VA is the calculation of output (OUT) (calculated from total sales) minus input (IN) (calculated from purchased materials, or the cost of goods or services sold), it can also be calculated by adding operational income (OP), employee costs (EC), depreciation (D) and amortization (A).
HC : total salary and wages
SC : VA - HC: structural capital
CE : book value of net assets
Company Size

As indicated by Hartono (2000) the company size can be estimated by the total assets of the organization by utilizing the logarithm value computation of total assets. The formulas that have been used are as follows Hartono (2000):

\[ UP = \ln (\text{Total Asset}) \]

Dependent Variable

The value of the company

According to Sartono (2008: 43) the notion of company value is an investor view of the organization, which is regularly interpreted as price changes. High stock price make the value of the organization is likewise high.

Population and Sample

This is a quantitative research. The population in this research are organizations in the property, real estate and building construction listed on the IDX during 2015-2018. Purposive sampling techniques is used. The sample data used in the study were 54 observations.

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coal Mining that is listed on the Indonesia Stock Exchange in 2016-2018 = 22 x 3 years</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>Companies / years that do not publish 2016-2018 financial statements</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Number of Samples During the Research Period 54

Data analysis technique

Multiple regression analysis methods used to test hypotheses and before previously testing of classical assumptions. The regression equation is as follows:

\[ NP = \alpha + \beta_1 IC + \beta_2 KI + \beta_3 UP + \epsilon \]

Information:

NP : The value of the company
\( \alpha \) : A constant
\( \beta_1 - \beta_3 \) : Regression coefficient of each independent variable
IC : Intellectual Capital
KI : Institutional Ownership
UP : Company Size
4. Results and Discussion

<table>
<thead>
<tr>
<th>Multiple Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>IC</td>
</tr>
<tr>
<td>KI</td>
</tr>
<tr>
<td>UP</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS 24 in 2020

Based on the above table, this research can be made a regression equation model as follows:

The value of the company = -1.186 + 0.000 IC + 0.328 KI + 0.049

Goodness of Fit Test
Coefficient of Determination (Adjusted R2)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>0.078</td>
<td>0.3002</td>
</tr>
</tbody>
</table>

Based on the results of the coefficient of determination obtained Adjusted R Square value of 0.078 which means 7.8% of the variable Company value can be explained by the variable Intellectual capital (IC), Institutional Ownership (KI), and Company Size (UP), while the remaining 92.8% is explained by company size variables, profitability, and leverage outside the regression model.

Model Fit Test (Statistical Test F)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.258</td>
<td>0.029</td>
</tr>
</tbody>
</table>

From the value statistically shows a significant result at α = 0.05 that is equal to 0.029 meaning a significance value <0.05. This shows that the independent variable Company Size (UP), Institutional Ownership (IC), and Intellectual Capital (IC) have a significant positive effect on the dependent variable Company Value.
Significance Test of Individual Parameters (Statistical Test t)

<table>
<thead>
<tr>
<th>Statistical Test t</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Regression Analysis</td>
<td>B</td>
<td>T</td>
<td>Sig</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.186</td>
<td>-1.536</td>
<td>0.131</td>
</tr>
<tr>
<td>IC</td>
<td>0.000</td>
<td>0.249</td>
<td>0.804</td>
</tr>
<tr>
<td>KI</td>
<td>0.328</td>
<td>2.018</td>
<td>0.049</td>
</tr>
<tr>
<td>UP</td>
<td>0.049</td>
<td>1.877</td>
<td>0.066</td>
</tr>
</tbody>
</table>

Source: Secondary data processed in 2020.

Discussion

First Hypothesis Test Results
The test results showed that the t-value value of institutional ownership was 2.018, the value of tvalue was 2.018 > ttable was 1.67528, while the significant value was 0.049 < 0.05 and the regression coefficient value was 0.328. Thus, H0 is rejected and Ha is accepted and it can be concluded that institutional ownership has a positive effect on firm firm value. Thus, the first hypothesis which states that institutional ownership has a positive effect on firm value is accepted. This means that any low institutional ownership is followed by high company value. So, the amount of institutional ownership owned by the company affects the high value of the company. The results of this study are in line with research from Nuraina (2012), Qomariah (2016), and Lestari (2017) which concluded that institutional ownership has a positive effect on firm value.

Institutional ownership generally has a large proportion of ownership so that the monitoring process of managers is better. The high level of institutional ownership will lead to greater supervision efforts by institutional investors, which can hinder the opportunistic behavior of managers. Shleifer and Vishny (1999) argue that institutional shareholders have an incentive to monitor corporate decision making. This will have a positive effect on the company, both in terms of increasing company value and increasing business performance.

Second Hypothesis Results
The results of the t-test showed that the value of tvalue of intellectual capital was 0.249, the value of tvalue was 0.249 < ttable 1.67528, while the significant value was 0.804 > 0.05 and the value of the regression coefficient was 0.000. Thus, H0 is accepted and Ha is rejected and it can be concluded that intellectual capital has no effect on firm value. Thus, the second hypothesis which states that intellectual capital has a positive effect on firm value is rejected. This means that any low intellectual capital will reduce the value of the company. So, the amount of intellectual capital owned by the company affects the high value of the company. The results of this study are in line with research conducted by Fadlun (2016) which states that intellectual capital has no effect on firm value. This result cannot yet be proven by the Resource-Based Theory (RBT) theory which explains that the company's ability to manage its resources properly can create a competitive advantage so
that it can create value for the company, because the results of our research are that intellectual capital has no effect on firm value. Kozlenkova et al. (2014) also explained that resources must have VRIO characteristics to be able to increase firm value, perhaps intellectual capital does not meet VRIO characteristics, so it does not increase firm value.

**Third Hypothesis Results**

The test results obtained that the t-value of company size was 1.877, the value of t-value was 1.877 > t table was 1.67528, while the significant value was 0.066> 0.05 and the regression coefficient value was 0.049. Thus, H0 is accepted and Ha is rejected, it can be concluded that the firm size variable has no effect on firm value. So the first hypothesis which states that company size has a positive effect on firm value is rejected. This means that every high or low size of the company will affect the value of the company. So, the size of the company owned by the company affects the high value of the company. The results of this study are in line with research conducted by Setiadarman and Machali M (2017), which states that company size has no effect on firm value. The results of the research on firm size variables are in line with theoretical predictions. Sugiarti, (2016), explained that company size is an indication of measuring the performance of a company. Basically, company value is measured from several aspects, one of which is the company's stock market price, because the company's stock market price reflects the investor's assessment of the total equity held (Wahyudi and Pawestri, 2006). Firm value is very important because high company value will be followed by high prosperity for shareholders, Martono (2010). Based on these definitions, it can be concluded that company value is the selling value of the company or added value for shareholders.

**5. Conclusions And Recommendations**

**Conclusions**

This study aims to examine the effect of Intellectual Capital Institutional Ownership, Company Size in the 2015-2018 Real Estate and Building Construction Industry Sector company on the Value of Companies listed on the Indonesia Stock Exchange. Based on the test results and the discussion described in the previous chapter, it can be concluded as follows:

1) Institutional Ownership has a positive effect on Company Value.
2) Intellectual Capital has no effect on Company Value.
3) Company size has no effect on Company Value.

**Recommendations**

1) Future research should include more independent variables such as the company's financial performance, independent board of commissioners, and audit quality.
2) Extend the research period for the sample under study in order to obtain better and more accurate results.
3) It is hoped that further research can increase and expand the number of samples so that it can clarify or update the old findings even better.
REFERENCES


