Abstract: The Company's value reflects the assets owned by the company. This study aims to examine the effect of intellectual capital disclosure and profitability on firm value. The Population are manufacturing companies listed on the Indonesia Stock Exchange in 2016 – 2020. The samples of this study are forty-four companies listed in Indonesia Stock Exchange (IDX) selected by using purposive sampling method. The data analysis method used is multiple regression model. Based on the hypothesis tasted proves that the intellectual capital disclosure and profitability have the positive and significant effect on firm value. Firm value is able to provide maximum welfare to shareholders. An increase in share prices can reflect the company’s assets.

Keywords: Profitability, intellectual capital disclosure, firm value

INTRODUCTION

Technological developments are increasingly influential in the business world. With these technological advances, companies must further update information so that companies are able to compete tightly both in the field of technology, aspects of company performance and in producing a product. The goal is that investors can
find out general company information (Ardianto & Rivandi, 2018). Encouraging economic progress and lifestyle requires new steps in producing goods from the methods used previously. The development of industry in the manufacturing sector at this time is assisted by advances that can make manufacturing companies have more high quality with the existence of a computerized system and the implementation or workmanship is not only done by humans, but can also use robotic systems. Companies that follow the development of industry 4.0 take advantage of a more systematic supply chain and network in the world of operations. The presence of the 4.0 revolution gives new hope to companies, especially manufacturing on a large scale, the value of the company.

According to Rivandi (2018), the value of the company is something important and becomes the main object of the company to continue to increase the value of the company as a company's survival in the future (going concern). Market value is able to provide maximum welfare to shareholders. Rising stock prices can reflect the company's assets. Company assets can be reflected by the increase and increase in the stock price of a company. An increasing stock indicates prosperity for shareholders as well as firm value.

The situation where a company has been achieved is illustrated by the opinion of investors on the ability of management to manage the company, the enactment of the management function has been applied since the company was founded until now, which is called company value. The results of performance in a company are seen by the high value of company performance, if the value of the company increases, the welfare of the owners of large companies can be achieved, thus the
company's long-term goals can be achieved.(Ayu & Suarjaya, 2018). The situation where firm value is considered very important, the researcher formulates the problem that the researcher discusses, namely how Intellectual capital disclosure and profitability affect firm value.

The development of information and company knowledge can develop intellectual capital. The approach to using intangible assets focuses on various fields, management, information technology, sociology, and accounting are intellectual capital(Saputra, 2018). Intellectual capital is the company's main asset, because it can generate company value with increased capabilities. Decision making in reliable and also profitable information for investors can be published in the financial statements(Ardianto & Rivandi, 2018).

Profitability continues to increase recorded in the financial statements, indicating the company's ability to improve, it can illustrate the increasing wealth of investors and promises a promising future. The company is able to develop corporate value and provide guidance to investors through reporting information depending on the company's capabilities, thus providing future goals. The increased target will be taken by investors as a reference, thus the value of the company and share price in the eyes of shareholders will increase(Ayu & Suarjaya, 2018).

This research refers to research conducted(Salvi, Vitolla, Giakoumelou, Raimo, & Rubino, 2020).and(Reschiwati, Syahdina, & Handayani, 2020), the researcher combines to see that the presence of intellectual capital disclosure and profitability will affect the variable value of the company. Researchers see the many differences in the
results of researchers conducted by previous researchers, and researchers see that company value plays an important role in companies in improving company performance. The increasing value of the company will have a major impact on the increase in the company's stock price. Rising share prices will provide welfare for shareholders.

LITERATURE REVIEW

The value of the company

The value of the company is very important for the company, if the value of the company is high, the welfare of shareholders is also high. The higher the stock price of the company, the higher the value of the company. Starting from the beginning of the company's existence until now, it provides an illustration to the public that the company has a main goal to be achieved through a process of activities that generate company value. (Ardianto & Rivandi, 2018), (Subaida, Nurkholis, & Mardiati, 2018). (Primary, Sasongko, & Innayah, 2020), (Hatane, Angeline, Wedysiage, & Saputra, 2019)

Firm value is defined as the price that potential investors can pay if a company is to be sold. The better the value of the company will increase the welfare of the owner of the company. For companies that issue shares on the capital market, the price of shares traded on the stock exchange is an indicator of company value (Lumoly, Selin, 2018).
**Intellectual Capital Disclosure**

*Intellectual capital* is a term for intangible assets which is a combination of market and human-centered intellectual property and infrastructure that drives the implementation and development of the company. Intellectual capital includes all employee knowledge, organization and ability to create added value and sustainable competitive advantage Ulum (2017), (Heryana, Wahyudi, & Mawardi, 2020).

Table 1. Measurement of Intellectual Capital Disclosure

<table>
<thead>
<tr>
<th>No</th>
<th>Types of Intellectual Capital Disclosure</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employee related knowledge (Human Capital)</td>
<td>knowledge, skills, renewal and ability of employees individually to complete tasks well</td>
</tr>
<tr>
<td>2</td>
<td>Knowledge of customer relations (customer)</td>
<td>the value of the customer base, customer relationships, potential customers, and company working relationships</td>
</tr>
<tr>
<td>3</td>
<td>Knowledge related to the company (structural or organizational)</td>
<td>Enterprise infrastructure, employee productivity</td>
</tr>
</tbody>
</table>

Sources; Ulum (2017)
Profitability

Profitability is a way to find out the company is producing and getting profits or profits within a certain period, so we need a tool that can assess it. These tools are financial ratios Rivandi (2018), (Jihadi et al., 2021), (Reschiwati, Syahdina, & Handayani, 2020)

Profitability is the main factor in the company with regard to the results obtained by the company through its business activities. The more investors' interest in the company will increase the share price of the company. The high net profit generated by the company, the more investors are attracted to invest in the company. The company is able to increase profits in relation to the sale of assets and own capital (Pertiwi, Tommy, & Tumiwa, 2016).

The Influence of Intellectual Capital Disclosure on Firm Value

according to (Heryana et al., 2020), (Salvi, Vitolla, Giakoumelou, Raimo, & Rubino, 2020), (Rivandi & Septiano, 2021), (Kamath, 2017), Devi (2017), Ardianto & Rivandi (2018), and Rivandi (2018) shows that intellectual capital disclosure has a positive effect on firm value. Intellectual capital is the company's resources that underlie knowledge in the form of intangible assets so that it is used as value for the company. The positive signal obtained by investors through the ICD provided by the company is used to create innovation and competitive business competition. The value of the company increases as seen from the increasing number of ICD.

Intellectual capital disclosure namely intangible assets in the form of a combination of market and human-centered intellectual property along with infrastructure to encourage and develop the
company. Stakeholder trust in the company is expressed through information about intangible assets increases. The high company value is caused by the high number of ICDs. Based on the theory and research results, the researcher proposes a hypothesis that is proven empirically:

**H1: Intellectual capital disclosure has a positive effect on firm value**

The Effect of Profitability on Firm Value

According to research conducted by (Rivandi & Septiano, 2021), (Mubyarto, 2020), (Jihadi et al., 2021), (Reschiwati, Syahdina, & Handayani, 2020), Dhani & Utama (2017), Rivandi (2018), Susila & Prena (2019), and Chasanah (2019) shows that profitability has a positive effect on firm value. The value of the company increases due to high profitability. The success of a company in managing can increase profits that describe the company's good performance so that it can attract investors to invest.

Profitability is a way to find out the company generates and earns profit in a certain period. Profitability describes the company earning a profit, high profitability is obtained, the company value continues to increase and gives a signal to the company's performance so that investors are interested, many investors who are interested in the company can increase the company's stock price, the researchers propose a hypothesis that is proven empirically:

**H2: Profitability has a positive effect on firm value**
METHODS

Data And Sample

This type of research is quantitative research. This study uses quantitative research methods because the research data using numbers taken from the annual financial statements are used for the researcher's independent variables, namely intellectual capital disclosure and profitability.

The type of data used by the author is panel data. Sources of data used secondary data, namely data collected from various sources that exist in researchers. The data was obtained from the financial report website on the Indonesian Stock Exchange.

The research population is manufacturing companies on the Indonesia Stock Exchange in 2016-2020 totalling 144 companies. The sampling technique used is purposive sampling, namely sampling by using subjects based on predetermined criteria, namely (1) manufacturing companies listed on the IDX (2) companies issuing annual financial reports for the research period from 2014-2018 (3) companies that are not delisted research period 2014-2018.

Table 2. Proposive Sampling Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of manufacturing companies on the IDX in 2016</td>
<td>144</td>
</tr>
<tr>
<td>2.</td>
<td>Companies that do not have a complete Annual Financial Report for 2016-2020</td>
<td>(92)</td>
</tr>
<tr>
<td>3.</td>
<td>Companies that experienced delisting in the 2016-2020 research period</td>
<td>(6)</td>
</tr>
</tbody>
</table>

| Number of sample companies used: 44 |
| Number of years of research: 5 |
| Amount of final data used (43×5): 220 |
Based on the purposive sampling criteria, it can be concluded that the number of samples used in accordance with the criteria amounted to 44 companies with a 5-year observation year from 2016-2020, so the total observation data was 220 data.

**Variable Operational Definition**

The dependent variable of this research is firm value and the independent variable is intellectual capital disclosure and profitability.

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firm Value (Y)</td>
<td>The value of the company is the main thing for the company, if the value of the company is high, the welfare of shareholders will also be high. The higher the stock, the higher the value of the company.</td>
<td>$Q = \frac{(MVS + D)}{TA}$</td>
<td>(Rivandi, 2018)</td>
</tr>
</tbody>
</table>

Information:

*Tobin's Q*: Value of the company

MVS: Market value of shares obtained from the result of the number of shares outstanding × share price

D: Market value of debt is obtained from (current liabilities – current assets + long-term liabilities)

TA: Total assets of the company

(Salvi, Vitolla, Giakoumelou, Raimo, & Rubino, 2020)
<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td><em>Intellectual Capital Discourse</em> (X1)</td>
<td>There are three types of knowledge, namely knowledge related to employees (human capital), customers (customers), and companies (structural). These three types form intellectual capital for the company.</td>
<td>$ICD = \frac{\text{jumlah total pengungkapan ICD}}{\text{Skor Maksimal ICD}}$ (Rivandi, 2018)</td>
<td>(Ulum, 2017)</td>
</tr>
<tr>
<td>3.</td>
<td>Profitability (X2)</td>
<td>Profitability is a way to find out the company generates and earns profits or profits within a certain period, so an assessment tool is needed. The tool is a financial ratio.</td>
<td>$ROE = \frac{\text{Laba Bersih}}{\text{Total Modal}} \times 100$ (Herry, 2017)</td>
<td>(Reschiwati, Syahdina, &amp; Handayani, 2020),</td>
</tr>
</tbody>
</table>

**Data analysis technique**

**Panel Regression Analysis**

From panel regression analysis, it is used to explain the dependent or dependent variable using more than one independent variable Suryani & Hendryadi (2015). The tests contained in the panel
regression analysis are derived in the form of an equation or a model to be tested:

\[
Tobin's \ Qit = 0 + 1 \ ICDit + 2 \ ROEit + eit
\]

the explanation: Tobin's Qit shows firm value, ICDit shows Intellectual Capital Disclosure, ROEit shows profitability, 0 indicates coefficient, 1 is Regression coefficient, and 2 is regression coefficient, eit indicates error term

To prove the truth of the hypothesis, an analytical method is used in a quantitative way, carried out using the establishment of a feasibility test method for the Panel Regression Effect Model, namely Regression Fixed Effect Model and Random Effect Model.

according to Winarno (2009) revealed in general the regression panel model used to know the direction and magnitude of the influence of the independent variable on the dependent variable individually. The regression model that will be formed and analyzed must first be tested for the feasibility of the panel regression model using the likelihood test and the Hausman Test

\textbf{Hypothesis testing}

\textbf{T Uji test}

Significant individual parameters that show how far the independent variables individually on the dependent variable. significant for the T test <0.05 the independent variable has a partial effect on the dependent variable, on the contrary if > 0.05 the independent variable has no effect on the dependent variable.

\textbf{Determinant Test}
The determinant coefficient explains that measuring the percentage of the influence of the independent variable on the dependent or dependent variable. The coefficient of the determinant is seen in the Model Summary and can be measured by the value of R-Square or Adjusted R-Square. R-Square is used when there is only one independent variable (usually called multiple linear regression), while Adjusted R-Square is used when there is more than one independent variable. Calculating the value of the determinant coefficient can use R-Square and Adjusted R-Square (Purwanto & Sulistyastuti, 2017).

RESULT AND DISCUSSION

Panel Regression Model Feasibility Test

Hausman test

Accepted prerequisite testing uses the Random Regression model with Hausman Test testing. In the Hausman Test, the Random Effect Model (REM) can be accepted if the F-probability value generated in the test is above 0.05. Based on the results of the tests that have been carried out, a summary of the results is shown in table 3 below:

Table 4. Hausman Test Results

<table>
<thead>
<tr>
<th>Correlated Random Effects - Hausman Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: Untitled</td>
</tr>
<tr>
<td>Test cross-section random effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistics</th>
<th>Chi-Sq. df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>1.692534</td>
<td>3</td>
<td>0.6386</td>
</tr>
</tbody>
</table>

Source: Results Eviews 8, 2021
Based on the results of the tests that have been carried out, the probability value is 0.6386, the processing is carried out using an error rate of 0.05. The results obtained in the Husman Test show that the probability value is 0.6386 alpha 0.05, so it can be concluded that the use of the Random Effect Model (REM) in the current research model is good and feasible to use.

**Random Effect Regression Model**

Random Effect Regression Analysis This research model is used to state the functional relationship between the independent variable and the dependent variable. Random Effect Model Regression Analysis was performed using the Eviews application. The following are the results obtained from the processed Regression Random Effect Model.

Table 5. Random Effect Model Regression Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.165</td>
</tr>
<tr>
<td>ICD logs</td>
<td>2.755</td>
</tr>
<tr>
<td>Profitability Logs</td>
<td>0.138</td>
</tr>
</tbody>
</table>

Source: Eviews Results, 2021

In Table 5 above, the multiple regression equation can be formulated as follows:

\[ Tobins'Q = 1.165 + 2.755 \text{ICD} + 0.138 \text{ROE} \]

Based on the results of these tests, namely the constant (\(\alpha\)) of the multiple regression model, it can be seen that the resulting constant value is 1.165. The value obtained indicates that if it is
assumed that there is a change (increase/decrease) in the ICD and profitability variables, the firm’s variable value is 1.165.

The intellectual capital disclosure variable has a positive coefficient value of 2.755. The coefficient value obtained shows that it is assumed that an increase in ICD by 1 item will increase the firm value variable by 2.755 with the assumption that factors other than the intellectual capital disclosure variable are considered constant or fixed.

The profitability variable has a positive multiple regression coefficient of 0.138. The coefficient value obtained shows that it is assumed that an increase in profitability of 1% will increase the firm value variable by 0.138% with the assumption that other factors other than the profitability variable are considered constant or fixed.

**Hypothesis test**

Table 6. T-Statistics Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>T-Count</th>
<th>T-Table</th>
<th>Standard</th>
<th>Significant</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD logs</td>
<td>5,612</td>
<td>1.9709</td>
<td>0.05</td>
<td>0.000</td>
<td>H1 Accepted</td>
</tr>
<tr>
<td>Profitability-Logs</td>
<td>3,075</td>
<td>1.9709</td>
<td>0.05</td>
<td>0.002</td>
<td>H2 Accepted</td>
</tr>
</tbody>
</table>

Source: Eviews Results, 2021

Based on the results of Table 6, it shows that the first hypothesis using the intellectual capital disclosure variable with a value of tcount > ttable is 5.612 > 1.9709 with a significant 0.000 <0.05 then the decision is Ho is rejected and Ha is accepted so that it can be concluded that ICD has a positive and significant effect on firm value. manufacturing on the IDX.
The second hypothesis using the profitability variable as measured by ROE has a value of $t_{count} > t_{table}$, which is $3.075 > 1.9709$ with a significant $0.002 < 0.05$, the conclusion is $H_0$ is rejected while $H_a$ is accepted. It is concluded that profitability has a positive and significant effect on the value of manufacturing companies on the IDX.

Table 7. Adjusted R-Square. Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.467a</td>
<td>0.218</td>
<td>0.208</td>
</tr>
</tbody>
</table>

Source: Eviews Data Processing, 2021

Based on the results of testing the coefficient of determination in Table 7, the Adjusted $R^2$ value is 0.102. These results indicate that the ICD and Profitability variables have a contribution variation that affects the Firm Value, which is 20.8%. While the remaining 70.2% is explained by other variables that have not been used in the current study, such as corporate governance and financial performance.

DISCUSSION

The Effect of Intellectual Capital Disclosure on Firm Value

Based on the results of hypothesis testing, it was found that Intellectual Capital Disclosure as measured by calculating the percentage of Intellectual Capital Disclosure resulted in a positive and significant effect on firm value in manufacturing companies on the IDX. This suggests that the greater the value of ICD shares in the
company, the greater the effectiveness of the value of manufacturing companies on the IDX.

The findings obtained in this hypothesis testing stage are the same as the opinions or theories expressed by Ulum (2017) which reveals that the ICD information disclosed in the annual report will attract investors, this ICD has an impact on the value of the company, because the company presents more information including information that is not mandatory, with this the company has advantages and advantages so that investors tend to invest in company shares. ICD is also an effective means for companies to signal excellence because of the importance of intellectual capital for future wealth creation.

The results of this study are in accordance with research conducted by (Heryana et al., 2020), (Salvi, Vitolla, Giakoumelou, Raimo, & Rubino, 2020), (Rivandi & Septiano, 2021), (Kamath, 2017), Devi (2017), Ardianto & Rivandi (2018), and Rivandi (2018) that Intellectual Capital Disclosure has a positive effect on firm value. This happens because the higher the number of ICD, the higher the value of the company because the positive signal given by the company attracts investors to increase shares. An increase in the number of ICD can affect the positive perception that investors have of the company will also encourage an increase in stock prices on the value of the company.

Variable ICD It can be interpreted that in the manufacturing companies that are the overall sample the average intellectual capital disclosure obtained is 0.55. The management of all intellectual capital disclosures as measured by the measurement of intellectual capital
The Influence of Intellectual Capital Disclosure and Profitability... disclosures is effective in developing the value of the company, if the ICD is managed optimally, the company will be in good performance, with good performance shown by the company being interested in investors.

Investors give high ratings of companies that disclose extensive ICD holdings, because investors have confidence that only quality companies are willing to expand voluntary disclosure. Intellectual capital disclosure affects perceptions of financial performance. Company information through ICD reduces information asymmetry, high ICD disclosure will make investors know the overall company performance.

Information obtained by investors indicates in accordance with signaling theory that an organization tries to show signals in the form of information to investors through the disclosure of intellectual capital disclosure in a financial report. Disclosure of ICD in manufacturing companies on the IDX provides an overview of the condition and performance of the company, the more ICD disclosures, the higher the value of the company.

**The Effect of Profitability on Firm Value**

Based on the results of hypothesis testing, it was found that profitability measured by return on equity has a positive and significant effect on the value of manufacturing companies on the IDX. The results of the study indicate that the large value of profitability in the company can increase the value of the company.

The results of this study are in line with the theory described by Rivandi (2018) which reveals that higher profitability is measured by Return On Equity, the higher the firm value. High manufacturing
profitability on the IDX provides an increase in the value of the company. The company is successful in managing and generating increased company profits, the increase in company profits indicates that the company has good company performance. The increase in company profits gives a signal to investors to invest. The high profit of the company provides a high opportunity for the company to provide dividends to shareholders (stakeholders) is also high, it can automatically increase the value of the company.

The results of this study are in accordance with the research (Rivandi & Septiano, 2021), (Mubyarto, 2020), (Jihadi et al., 2021), (Reschiwati, Syahdina, & Handayani, 2020), Dhani & Utama (2017), Rivandi (2018), Susila & Prena (2019), and Chasanah (2019) who found that profitability had a positive effect on firm value. Basically, profitability shows the company is making a profit. The higher the level of profitability owned by the company, it can reflect that the company's financial performance is in good condition, so that it can attract investors.

Profitability variables in manufacturing companies as a whole are the average sample reached 10.02%. Profits owned by manufacturing companies on the IDX are overall good with the increase in company profits being used to increase company value. The company can achieve its goals by demonstrating the management's ability to generate profits as additional funds to carry out activities, namely increasing company value. The level of profit gives a big role for the company so that the company gets a good image.
The higher the profitability obtained, the value of the company will increase and provide a positive direction for the company. Profitability is seen as important for a company because profitability indicates how the company's performance during the year period, in addition to high profitability will be able to attract investors to invest in the company.

Profitability is an important element in assessing the company's success in managing the company's financial performance, so with this success it has an impact on the company's welfare for employees and provides an image for the company. The amount of profit earned is used to carry out operational or non-operational activities such as efforts to increase company performance so that it can contribute a lot to the surrounding environment.

CONCLUSION

Based on the analysis and discussion of the results of hypothesis testing described, several important conclusions can be proposed which are answers to the problems discussed in this study, namely: 1) Intellectual Capital Disclosure as measured by total ICD items has a positive and significant effect on the value of manufacturing companies on the IDX. The findings indicate that the higher the ICD, the higher the value of manufacturing companies on the IDX will increase. 2) Profitability is measured by the total percentage of profitability that has a positive and significant effect on the value of manufacturing companies on the IDX. The findings indicate that the higher the profitability will further encourage the increase in the value of manufacturing companies on the IDX.
Implications Research can provide an overview to the managerial importance in increasing the value of the company. Market value is able to provide maximum welfare to shareholders. Rising stock prices can reflect the company's assets. The value of the company can be increased by the company's performance both internally and externally. Effective and efficient manager policies and decisions that can provide information about the company will provide a positive response to investors.

REFERENCES


The Influence of Intellectual Capital Disclosure and Profitability...


Lumoly, Selin, V. (2018). Pengaruh Likuiditas, Ukuran Perusahaan Dan Profitabilitas Terhadap Nilai Perusahaan (Studi Pada


The Influence of Intellectual Capital Disclosure and Profitability...