IMPACT OF SIZE, LEVERAGE, PROFITABILITY, AGE AND INDEPENDENT COMMISSIONERS ON INTELLECTUAL CAPITAL DISCLOSURE

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Diterima: 6 Juli 2023  Direview: 12 Juli 2023  Dipublikasikan: 1 Agustus 2023

Abstract
The publishing of PSAK No. 19 on intangible assets marked the beginning of the idea of intellectual capital in Indonesia. It turns out that even while Indonesia has seen an increase in the disclosure of intellectual property, it is still a very little rise. Companies in Indonesia should be compelled to declare their intellectual property, especially those in the finance industry. This is because the financial services sector employs more intellectual capital in its operations than the industrial sector, which is heavily reliant on information and hence needs more on tangible assets. The purpose of this study is to ascertain how business age, leverage, profitability, and independent commissioners affect the disclosure of intellectual property. This study used a sample of 83 financial sector businesses that were listed on the Indonesia Stock Exchange in 2020–2021. There were 105 enterprises in the population overall. Panel data regression analysis with the Evievs programme version 12 is used in this study. The results of this study show that company age, debt, and business size all have positive and significant effects on the disclosure of intellectual capital. Profitability and the presence of independent commissioners, however, have little bearing on the disclosure of intellectual property. This study also shows that a variety of factors, like firm age, profitability, leverage, and independent commissioners, might affect the disclosure of intellectual property.

Keywords: Determinant, Intellectual Capital Disclosure

Abstrak

Kata Kunci: Determinasi, Pengungkapan Modal Intelektual
INTRODUCTION

The number of firms is increasing in tandem with societal advancement and rivalry. One cannot disentangle the enterprise organization's quick development and advancement from the assistance provided by its dedicated human resources. In Pulic and Bornemenn (Pulic et al., 2002), Drucker asserts that information has supplanted physical investment in the form of structures, machinery, and other facilities as the primary engine of the world economy and the most crucial component in production. The role of the human resources employed there is intimately tied to their knowledge and intellectual capital. sometimes referred to as Intellectual Capital Disclosure (ICD), or simply Intellectual Capital Disclosure. Intellectual capital is the key component used to calculate a company's worth. By creating, capturing, and using their intellectual capital, businesses may raise the value of their assets. According to Stewart (Stewart, 1997) intellectual capital is the sum of all the knowledge that employees provide to the organisation that gives it a competitive advantage. However, the Organisation for Economic Cooperation and Development (OECD) claims that intellectual capital is a mix of the economic worth of organisational (structural) capital and human capital (I Ulum, 2009a).

Human capital, structural capital, or organisational capital, and relational capital, or customer capital, are the three basic parts of intellectual capital (Suwardjono, 1986). Without human capital, intellectual capital cannot exist. Although it is a source of innovation and advancement, measuring it is challenging. Organisations and businesses may benefit greatly from the knowledge, skills, and competences that human resources can offer (Brüggen et al., 2009). The presence of PSAK No. 19 respecting intangible assets marked the beginning of the intellectual capital phenomena in Indonesia. Despite the fact that ICD has begun to grow in Indonesia, it turns out that the growth is still modest. Additionally, ICD in PSAK is not governed by any standards (Septiana & Yuyetta, 2013). Although ICD is still voluntary, this disclosure is necessary in order to reduce information asymmetry between shareholders and other stakeholders and managers as managers of the firm.

Academics and business professionals are interested in using ICD as a tool to assess company value (Purnomosidhi, 2006). Because intellectual capital comprises more intangible assets than tangible assets, maintaining, measuring and reporting it can be challenging. As a result, not all businesses disclose their intellectual capital. ICD must be applicable to companies in Indonesia, especially companies in the financial sector. This is because the financial services industry is knowledge intensive because its activities use more intellectual capital compared to the manufacturing industry which uses more physical assets (Firer & Mitchell Williams, 2003). The financial industry makes one of the most extensive applications of intellectual capital. The financial sector is crucial to the nation's economy, particularly to its mobility and expansion. Due to this, there is fierce rivalry within the financial industry to offer customers better services. Corporate intellectuals are frequently tempted to join rival businesses in order to keep a competitive advantage over other businesses that are comparable to theirs in an environment of such fierce rivalry. (Putra, 2012).

According to (Gho, 2005), financial sector companies depend on physical capital to operate, but the quality of services and products they provide to customers depend on intellectual capital. Good corporate governance recommends utilizing their knowledge or intellectual capital internally and externally so that companies are ready to face challenges and increase customer demand for product and service sophistication and innovation (Al-Obaidan, 2008). In line with what was disclosed (Roos, J. et al., 1998) that companies must be able to continue to improve corporate governance by maximizing value creation through intellectual capital.

The dependent variable used in this study and focused on by researchers is ICD. Disclosure of intellectual capital is influenced by several factors whose influence has been tested in previous studies. Factors that affect intellectual capital can include company size and age (Aisyah & Sudarno, 2014). Leverage (Andika & Laksito, 2015), Profitability (Prabowo & Purwanto, 2019) and comissionair independent (Ashari & Putra, 2016a) (Gregory et al., 2007), (A Nugroho, 2012)

This study was conducted because there is still a research gap in previous studies. The first factor that is thought to have an impact on ICD is company size. Based on the results of studies (Setianto & Purwanto, 2014), (Nafisah & Meiranto, 2017) and (Bhatia & Agarwal, 2015) shows that firm size has a positive and significant effect on ICD. On the contrary, (Morariu, 2013) found in his research that firm size has no effect on ICD.
Another factor that is thought to influence ICD is leverage. Research (Erlisa Shinta Asfahani, 2017), (Angeline & Novita, 2020) and (Linda et al., 2019) show that leverage has an impact on ICD. At the same time (E. N. Sari & Arisanti, 2018) and (Ferreira et al., 2012) it is known that leverage has no effect on ICD. The third factor that is believed to influence ICD is profitability. According to research results (Ashari & Putra, 2016a), the profit variable affects ICD. Although research by (Dwiapayani & Putri, 2016) found that profitability has no impact on ICD.

The fourth factor believed to influence ICD is firm age. Based on research results (Erlisa Shinta Asfahani, 2017), (M. Joson & Susanti, 2015) and (Suwarti et al., 2016) found a positive relationship between entrepreneurial age and ICD. At the same time, a study (Nikolaj Bukh et al., 2005) found that age still had no effect on ICD. And the fifth factor that is thought to have an impact on ICD is the independent commissioner. The results of studies (Wahyuni & Rasmini, 2016) and (Linda et al., 2019) stated that the proportion of independent commissioners had an impact on ICD. Whereas (Dwiapayani & Putri, 2016) and (Rahayuni et al., 2018) state that the proportion of independent commissioners has no impact on ICD.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Intellectual Capital Disclosure

Brooking, in (I Ulum, 2009a) states that intellectual capital is a combination of intangible assets, assets, intellectuals, employees, and infrastructure that enables businesses to operate. Another definition of intellectual capital is an intangible resource that contains knowledge and has the potential to influence the company's success in the future (Pramestiningrum, 2013). According to Yates et al., in Ulum (Ihyaul Ulum et al., 2020) the intellectual component is divided into human capital, structural capital and customer capital.

The personal talents of workers are the source of corporate innovation, strategies, visions, process reengineering, and everything else that results in a positive market perception for the firm in the eyes of the market so that the company may outperform the competition and sell (Bontis & Nick, 1998). (Nasution & Ovarni, 2021) assert that human resources are crucial. Bukh et al. (Nikolaj Bukh et al., 2005) developed a methodology for reporting intellectual capital by classifying it into six categories. The authors of (Branswijck & Everaert, 2012) utilise this classification and then improve it. There are six groups of intellectual capital items: human resources, customers, information technology, processes, study and development, strategic statements, and customers. So, that the total items used in this study are 83 items.

Firm Size

The assets, number of sales, average total revenue, and average total assets of a company all contribute to its size. Large company size is useful information for investors because it can predict future profit levels. A large enough company size may indicate that the company is growing, as can be inferred from the total balance sheet asset value. A business that has a sizeable total asset is a mature business. Because of perceived good cash flow and long-term profit prospects, companies with high total assets are also seen as more successful and stable. Large-scale investment will definitely attract investors. This is motivated by operational confidence, confidence in better future business prospects, and confidence in the company's ability to offer value (Sintyana & Artini, 2019). According to (Werner, 2013), firm size is calculated using the logarithm of total assets (Sintyana & Artini, 2019). According to (Werner, 2013), firm size is calculated using the logarithm of total assets.

\[ \text{Firm Size} = \ln \text{Total Assets} \]

Leverage

Leverage according to Maryam (Maryam, 2014) is the use of a large number of assets or funds by a corporation where the company must incur fixed expenses in order to be able to use these assets or funds. When a corporation uses excessive amounts of debt, it endangers itself because it is included in the extreme leverage category, where it is trapped with a lot of debt and it is difficult to get out from under it (Fahmi, 2017). The ability of a business to use resources with fixed to increase the level of income (return) for business owners is referred to as leverage. Leverage is also used to measure a company's capacity to meet all of its long-term and short-term obligations if it is dissolved.
Agency fees will be higher for businesses with high amounts of debt in their companies' capital structure than a business with a low proportion of debt. According to agency theory, firms with larger leverage ratios should disclose more information because it will increase their agency costs (Michael C. Jensen & Meckling, 1976). Leverage is calculated in this study using the ratio equation DAR (debt to Asset Ratio) (Fabozzi & Drake, 2009):

\[
\text{DAR} = \frac{\text{Total Current Liabilities}}{\text{Total Assets}}
\]

**Profitability**
Profitability is a measure of an organization's capacity to generate revenue (profit). Good profitability thus illustrates the company's strength in handling profits. The more profitable the company, the more rewards it will receive, according to the company concerned. This rule is used to reduce the effectiveness of the use of organizational assets and managerial effectiveness which can be seen from the profits generated by investment and recruitment of new staff (Kasmir, 2017). According to the study (Erlisa Shinta Asfahani, 2017), determining profitability through ROA is done by comparing profit with a positive coefficient on total assets (V. Sujarweni, 2019).

\[
\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}
\]

**Firm Age**
The age of the company shows how long the company can continue to operate in the commercial sector. The date of company establishment until December 31, 2021 is used to calculate the age of the company (Ahmadi Nugroho, 2012). As a company gets older, its existence (going concern) becomes clearer, increases the amount of information disclosed and fosters external confidence in the quality of the organization. According to agency theory, company agents will usually provide more information to principals because they have more expertise and can demonstrate the company's longevity and ability to thrive in the commercial world. According to (I Ulum, 2009b) in measuring the age of the company, it is calculated from the date of the IPO to the date of the annual report.

\[
\text{Firm Age} = \text{The last year the company was listed on the IDX} - \text{IPO year}
\]

**Independent Commissioner**
Members of the board of commissioners who are called independent commissioners are free from any personal or professional ties with the directors or controlling shareholders. The percentage of independent commissioners is calculated by dividing their number by the number of commissioners in the organization. Independent commissioners have a significant role as intermediary managers with shareholders and other stakeholders, according to agency theory. To prevent shareholders and other stakeholders from being harmed, Istanti (Istanti, 2009) argues that an impartial independent commissioner must be able to monitor shareholders with respect to company operations and regulate the behavior of company managers. Making greater disclosure is one method of protection that can be used by independent commissioners (Yuniasih et al., 2012). Based on (Komite Nasional Kebijakan Governance, 2006), calculating the proportion of independent commissioners is as follows:

\[
\text{Independent Commissioner} = \frac{\text{Total Independent Commissioner}}{\text{Total Commissioner Board}} \times 100\%
\]

**Conceptual Framework**
The purpose of this study is to find out how ICD is decided in financial organizations in Indonesia. Firm size, leverage, profitability, firm age, and independent agency are business characteristics related to ICD. The conceptual basis of this research is as follows:
The Impact of Firm Size on Intellectual Capital Disclosure

The total assets controlled by a company serve as a measure of its size. The size of the company increases along with the increase in assets owned by the company. There are more opportunities for large companies with multiple assets to improve their intellectual capital performance. This puts increasing pressure on big businesses to disclose their intellectual property. Agency theory has a relationship with the relationship between business size and intellectual property disclosure. Compared to small businesses, large corporations sometimes have higher agency costs. ICD can be considered to reduce information asymmetry and agency costs because it will be seen as responsible for the performance of business management. The above theory is also supported by previous studies conducted by (Setianto & Purwanto, 2014), (Nafisah & Meiranto, 2017) and (Bhatia & Agarwal, 2015) that firm size has an impact on ICD. Based on this description, the hypothesis to be tested is as follows:

H1: Firm size has an impact on ICD

Impact of Leverage on ICD

Leverage reveals how much debt a business uses to fund its activities. All debts and total business capital can be compared to get the leverage ratio. This ratio is used to evaluate a company's potential exposure to the risk of bad debts. Leverage is also useful for analyzing, organizing and managing business money. Agency theory is connected to the relationship between ICD and leverage. (Michael C. Jensen & Meckling, 1976) assertion that highly leveraged firms may experience a shift in wealth from debtholders to investors and management, leading to high agency costs, lends credence to this point. Companies are forced to communicate information more openly, including ICD, to reduce agency costs and information asymmetry among interested parties. The above theory is also supported by previous studies conducted by (E. S Asfahani, 2017), (Anggeline & Novita, 2020) and (Linda et al., 2019) which show that leverage has a significant impact on ICD. The following hypotheses must be proven:

H2: Leverage has an impact on ICD

Impact of Profitability on ICD

The capacity of a business to generate money over a period of time is known as profitability. The greater the profitability of a company, the better it shows that the business is performing. It is also directly related to the probability that the business will survive in the long term. (Ferreira et al., 2012) claim that businesses with high profitability are motivated to stand out from rivals with lower profitability by signaling investors through more intellectual property disclosure. Signaling theory is relevant here. More information about intellectual capital is disclosed in financial accounts as company profitability increases. The above theory is also supported by a previous study conducted by...
which shows that profitability has a significant impact on ICD. The following hypotheses must be proven:

H3: Profitability has an impact on ICD

Impact of Firm Age on ICD

According to estimates, the age of the company and the quality of disclosure of information about itself are interrelated. The underlying reason is that more established businesses have greater expertise with the publication of financial statements. Companies with more experience will be more aware of their demands in terms of information. There is a correlation between business age and ICD, according to studies (Gregory et al., 2007). The above theory is also supported by previous studies conducted by (E. S Asfahani, 2017), (M. Joson & Susanti, 2015; Suwarti et al., 2016) found results that there is a positive relationship between firm age and ICD. It is possible to draw the following conclusions:

H4: Firm age has an impact on ICD

Impact of Independent Commissioners on ICD

The percentage of independent commissioners is seen as a measure of the board's detachment from management. Due to the independent representation of shareholder interests and the lack of working relationship of independent commissioners with the company, the inclusion of independent commissioners on the board can increase the effectiveness of supervisory actions within the company (Ruiz-Palomo et al., 2020). Independent commissioners and intellectual property disclosure have a substantial relationship, according to a study by (Gregory et al., 2007). The above theory is also supported by previous studies conducted by (Linda et al., 2019; Wahyun & Rasmin, 2016) which stated that the proportion of independent commissioners has an impact on ICD. Therefore, it is possible to draw the following conclusions:

H5: Independent Commissioners have an impact on ICD

RESEARCH METHOD

Research design

The study method used by researchers is quantitative, where researchers analyze a sample or population by testing several hypotheses, analyzing data quantitatively and collecting data using certain instruments (Sugiyono, 2021). The secondary data used is downloaded from the annual reports of financial sector companies listed on the Indonesia Stock Exchange through the website www.idx.co.id and the company's website.

Population and Sample

The population for this study is 105 financial companies listed on the Indonesia Stock Exchange (IDX) for 2020–2021. The sampling method used in this study was purposive sampling, namely choosing a sample according to the standards set by the researcher. The standards that must be met to be used as samples are as follows:
1. Financial sector companies listed on the IDX
2. Companies that have the complete data needed in this study from 2020 to 2021.

Based on the above criteria, the following is a table of the number of samples used in this study:

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of financial sector companies listed on the IDX</td>
<td>105</td>
</tr>
<tr>
<td>2</td>
<td>Companies that do not have the complete data required in this study from 2020 to 2021.</td>
<td>(22)</td>
</tr>
</tbody>
</table>

| TOTAL | 83 x 2 year = 166 |

Source: processed data. 2023

Data analysis technique

This study uses a data plane regression analysis with the Eviews program version 12 as the data analysis method. The significance level of the regression coefficient of each independent variable on the dependent variable is calculated using a statistical test as shown below. (1) perform descriptive statistical tests. (2) Determine the data panel of the general effects model, fixed effects model, and
random effects model. To select the panel data regression model, the Chow, Hausman, and Lagrange multiplier tests were used. Perform multiple linear regression analyzes in step four. (4) The classical assumption test includes normality test, multicollinearity test, and heteroscedasticity test. (5) Doing a hypothesis test that combines a partial test (t test), simultaneous test (F test) and test the coefficient of determination (R2).

RESULTS AND DISCUSSION

Descriptive statistical analysis.

Descriptive statistics are used to describe a data presented in the form of a minimum score, maximum score, mean (mean), standard deviation and variance.

**Table 2. Descriptive Statistical Test Results**

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.419</td>
<td>17.755</td>
<td>0.937</td>
<td>0.008</td>
<td>47.675</td>
<td>0.57</td>
</tr>
<tr>
<td>Median</td>
<td>0.422</td>
<td>16.672</td>
<td>0.738</td>
<td>0.014</td>
<td>39</td>
<td>0.6</td>
</tr>
<tr>
<td>Max</td>
<td>0.539</td>
<td>29.412</td>
<td>8.812</td>
<td>0.063</td>
<td>124</td>
<td>0.75</td>
</tr>
<tr>
<td>Min</td>
<td>0.333</td>
<td>5.901</td>
<td>0.082</td>
<td>-0.18</td>
<td>30</td>
<td>0.25</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>0.05</td>
<td>5.232</td>
<td>1.295</td>
<td>0.04</td>
<td>22.286</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Source: processed data. 2023

The findings of the descriptive statistical tests conducted on the 166 company data used in this study are shown in table 1 below:

1. ICD variable with a minimum value of 0.333. maximum value 0.539. the average value is 0.419. and a standard deviation of 0.05. This shows that the average ICD in the sample companies is only 41.9%.

2. Company size variable with a minimum value of 5,901 and a maximum value of 29,412. the mean value is 17,755 and the standard deviation is 5,232. this shows that the average company size is 17.8

3. The leverage variable ranges from 0.082 to 8.812 as the minimum and maximum values. This shows that the company's ability to pay debts through assets has an average value of 0.937 and a standard deviation of 1.295.

4. The profitability variable ranges from -0.180 to 0.063. with minimum value. This shows that the average rate of return on company assets is 0.008. and the standard deviation value is 0.041.

5. Company age variable with a minimum value of 30. a maximum value of 124. an average value of 47,675. and a standard deviation of 22,286. This shows that the average age of the company in the sample is 48 years.

6. Independent commissioner variable with a minimum value of 0.25 and a maximum value of 0.75. has an average value of 0.570 and a standard deviation of 0.128. This expert shows that the average composition of the number of independent commissioners is 57%.

Estimation Model Selection

Common effect models, fixed effect models, and random effects models are three panel data regression estimation models that can be used. A number of tests, including the Chow test. Hausman test and multiplier lagrange test must be run to select the best panel data regression estimation model.

Chow test

**Tabel 3. Hasil Uji Chow**

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>d.f</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Section F</td>
<td>(19,15)</td>
<td>0.000</td>
</tr>
<tr>
<td>Cross Section Chi-Square</td>
<td>19</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Processed data. 2023

It is clear from the Chow test findings above that the possible chi-square cross section is 0.000 < 0.05. Therefore the fixed effect is the chosen model. To determine the right model between
fixed effects and random effects to be used in this study. Hausman test must be done if the selected model has a fixed effect.

**Hausman test**

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq Statistic</th>
<th>Chi-Square d.f</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Section Random</td>
<td>0.2634819</td>
<td>5</td>
<td>1.3782</td>
</tr>
</tbody>
</table>

*Source: Processed data. 2023*

The chi square result is 1.3782 > 0.05. which shows that the model used in this study is a random effect model. according to the results of the Hausman test mentioned above. The optimum Random Effect or Common Effect model is then determined using the Lagrange Multiplier (LM) test.

**Lagrange Multiplier Test**

<table>
<thead>
<tr>
<th>Cross Section</th>
<th>Test Hypotesis Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch Pagan</td>
<td>17,09351</td>
<td>1.04021</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.3078)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

*Source: Processed data. 2023*

Table 5 test results show that the probability value (Prob) is Breusch Pagan. generated by 0.0000 where the value is less than 0.05. Therefore. Random Effects model should be applied to this study. It is not important to evaluate conventional assumptions because the Random Effects (REM) model is used in this investigation. The generalized least squares (GLS) approach is used in the random effects model panel data estimation method. According to (Gujarati & Porter, 2009), the GLS technique has the benefit of not requiring a classical assumption test.

**Panel Data Regression**

Panel Data Regression Test Results The panel data regression test results for the random effect model of this study are as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.418</td>
<td>5.84</td>
<td>7.17</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>7.16</td>
<td>2.86</td>
<td>2.506</td>
<td>0.0242</td>
</tr>
<tr>
<td>X2</td>
<td>1.97</td>
<td>7.63</td>
<td>2.581</td>
<td>0.0209</td>
</tr>
<tr>
<td>X3</td>
<td>2.2</td>
<td>1.99</td>
<td>1.103</td>
<td>0.2872</td>
</tr>
<tr>
<td>X4</td>
<td>-3.05</td>
<td>7.87</td>
<td>-3.871</td>
<td>0.0015</td>
</tr>
<tr>
<td>X5</td>
<td>8.08</td>
<td>4.55</td>
<td>1.776</td>
<td>0.0960</td>
</tr>
</tbody>
</table>

*Source: Processed data. 2023*

Based on table 6 the regression model equation used in the study is as follows:

\[ Y = 0.418 + 7.16X1 + 1.97X2 + 2.20X3 - 3.05X4 + 8.08X5. \]

Based on the equation above, it can be seen that:

1. The constant 0.418714 means that the independent variable is size, ROA, DAR, age and independent commissioners is 0. then the ICD value is 0.418714.
2. The coefficient of the size variable is 7.16 which shows that size has a positive impact on ICD. If the size increases by one unit. then the ICD value will result in an increase of 7.16.
3. The ROA variable has a coefficient value of 1.97 which shows that ROA has a positive impact on ICD. ROA has increased by one unit. so that the ROA value will result in an increase in ICD of 1.97.
4. The DAR variable has a coefficient value of 2.20 which shows that DAR has a positive impact on ICD. If the DAR is increased by one unit. DAR will increase by 2.20.
5. The age variable has a coefficient value of -3.05 which shows that age has a negative impact on ICD. If age increases by one unit Age will decrease by 3.05.
6. The IC variable has a coefficient value of 8.08 which shows that IC has a positive impact on ICD. If the IC increases by one unit, the IC value will result in an increase in ICD of 8.08.
Hypothesis testing
This test includes a partial test (t test), simultaneous test (F) and coefficient of determination test (R2).

**Partial Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.418</td>
<td>5.84</td>
<td>7.17</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>7.16</td>
<td>2.86</td>
<td>2.506</td>
<td>0.0242</td>
</tr>
<tr>
<td>X2</td>
<td>1.97</td>
<td>7.63</td>
<td>2.581</td>
<td>0.0209</td>
</tr>
<tr>
<td>X3</td>
<td>2.2</td>
<td>1.99</td>
<td>1.103</td>
<td>0.2872</td>
</tr>
<tr>
<td>X4</td>
<td>-3.05</td>
<td>7.87</td>
<td>-3.871</td>
<td>0.0015</td>
</tr>
<tr>
<td>X5</td>
<td>8.08</td>
<td>4.55</td>
<td>1.776</td>
<td>0.0960</td>
</tr>
</tbody>
</table>

*Source: Processed data. 2023*

Based on the test results in the table above, it can be explained that:
1. The first hypothesis of this study is that firm size has an impact on ICD. The first hypothesis is accepted because the calculated probability value is less than 0.05 (0.0242 < 0.05). We can conclude that size increases ICD significantly.
2. According to the findings, the probability value of t is smaller than 0.05 (0.0209 < 0.05), which supports the second hypothesis. Therefore, it can be said that leverage significantly affects ICD.
3. The third hypothesis is rejected based on the test findings, which shows that the calculated probability value is more than 0.05 (0.2872 > 0.05). Therefore, it can be argued that profitability has little or no impact on ICD.
4. Firm age is the fourth hypothesis in this investigation. The fourth hypothesis is supported because the test results show that the calculated probability value of t is less than 0.05 (0.0015 < 0.05). It can be concluded that firm age significantly increases ICD.
5. The fifth hypothesis is rejected by findings showing that the estimated probability value is more than 0.05 (0.0960 > 0.05). Therefore, it can be said that the independent commissioner has no impact on the ICD.

**Simultaneous Test (F)**

<table>
<thead>
<tr>
<th>Weight Statistics</th>
<th>R-Squared</th>
<th>Adjust R-squared</th>
<th>S.E. of regression</th>
<th>F-statistic</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Squared</td>
<td>0.128425</td>
<td>0.000252</td>
<td>0.048556</td>
<td>1.001965</td>
<td>0.031471</td>
</tr>
<tr>
<td>Mean dependent var</td>
<td>0.736347</td>
<td>S.D. dependent var</td>
<td>Sum squared resid</td>
<td>5.46E-25</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>3.809524</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Processed data. 2023*

Estimated value of Prob (F-statistic) Table 8 of 0.031471 <0.05 leads to the conclusion that all the independent variables are firm size, leverage, profitability, company age, and independent commissioners have an impact on the dependent variable, namely ICD. The findings of this study are consistent with (Bohalima et al., 2021; B. N. Sari & Ovami, 2022) who use independent variables to examine the simultaneous impact of ICD on firm size, age, profitability, leverage and independent commissioners.

**Test the coefficient of determination (R2)**

<table>
<thead>
<tr>
<th>Unweight Statistics</th>
<th>R-Squared</th>
<th>Sum squared resid</th>
<th>Mean dependent var</th>
<th>Durbin Wtson stat</th>
<th>0.418714</th>
<th>3.809524</th>
</tr>
</thead>
</table>

*Source: Processed data. 2023*

Based on Table 9, the modified R value is 0.287211. or 28.7%. It is proven that the study of the independent variable can account for 28.7% of the dependent variable. While the remaining 71.3%
can be explained by factors not included in this study, such as concentration of ownership, type of auditors, industry, management ownership, etc.

**DISCUSSION**

**Impact of Company Size on ICD**

Based on the findings of the hypothesis testing carried out. It is known that the first hypothesis which states that company size has an impact on ICD is correct. The results of this study make it clear that the size of the company can expand the ICD. Large companies carry out more activities and usually have different business units that have the potential to create different long-term value, which increases the company's awareness of ICD growth.

Total assets are used as a proxy for the firm size variable. Because it has qualified human resources (workers), businesses with high total assets are able to disclose intellectual property widely. Because businesses need to realize that intellectual capital is one of the most valuable assets that can increase its value. Firm size can be used as an ICD benchmark. Besides that, it is thought that the size of a company can affect its market value because larger businesses tend to have access to both internal and external sources of funding.

Company size is a scale that shows company size based on total assets, sales volume, average sales, and average total asset (Brigham et al., 2001). The bigger the company, the more activities and the higher the potential use of employees’ intellectual capital (human capital), material assets (physical capital) and employees' organization (structural capital). Good management of all this potential creates added value for the company, which can improve intellectual capital performance. This study supports previous studies conducted by (E. S Asfahani, 2017; Bhatia & Agarwal, 2015; Herlina et al., 2021; Himawan, 2021; Nafisah & Meiranto, 2017; Setianto & Purwanto, 2014; Setyaningsih, 2015; Wicaksono, 2021) which show that company size has a significant impact on ICD. However, this is not in line with other studies, namely studies conducted (Ashari & Putra, 2016b; Priyanti & Wahyudin, 2015) which state that firm size has no significant effect on ICD. Large companies engage in many types of business activities. From a management point of view, ICD is not very important because it only adds to the costs that must be incurred by the company.

**Impact of Leverage on ICD**

The second hypothesis that leverage has an impact on ICD is known to be true based on the findings of the hypothesis testing that has been carried out. Debt to asset ratio (DAR), derived from data in financial accounts, can be used to determine the leverage ratio. This shows that even though the company's dependence on debt is very large. Companies with high debt levels tend to convince the public that the company is doing well. This means that highly indebted companies will disclose their intellectual capital widely. This step was implemented by management so that the company continues to gain the trust of creditors and stakeholders regarding the debt it issues. When management fully discloses intellectual capital, it gives creditors and stakeholders confidence that the resources they own are being managed by the right people.

Agency theory explains that companies with high debt levels tend to convince the public (creditors and stakeholders) that the company is still in good condition even though the debt level is high (Erlisa Shinta Asfahani, 2017). A different opinion was put forward by that companies with high levels of leverage would motivate management to (Dwipayani & Putri, 2016) that companies with high debt encourage management to disclose in more detail the intellectual capital that will gain public trust. ICD improvement is one of the company's strategies.

The management ICD area will increase with the leverage value. This is due to the fact that a high level of leverage will increase management incentives. The high proportion of leverage raises concerns for investors. and to maintain investor confidence. management should provide more detailed information. According to stakeholder theory. Creditors have the right to be informed about the company's operations. Therefore, the company will release more general information. including disclosure of intellectual property. to make sure of this. This study supports previous studies by (Alfianita, 2018; Anggeline & Novita, 2020; E. S Asfahani, 2017; Ashari & Putra, 2016b; Bohalima et al., 2021; Dwipayani & Putri, 2016; Kumala & Sari, 2016; Linda et al., 2019) which show that leverage significantly and beneficially impact ICD. However, this study is not in line with other studies conducted by (Ferreira et al., 2012; E. N. Sari & Arisanti, 2018) which show that leverage has no impact on ICD.
Profitability Impact on ICD

The third hypothesis states that profitability has no effect on ICD. Therefore, the third hypothesis is rejected. These results indicate that return on investment (ROA) has no significant effect on ICD, because a low return on investment ratio actually seeks to increase capital as much as possible by disclosing more information in the annual report. The level of the company's profit ratio that reflects the results of the company does not affect the disclosure of intellectual capital.

The phenomenon highlighted is related to the fact that industrial companies are still little aware of intellectual capital disclosure. Because the company does not consider it necessary to disclose intellectual capital. The higher the company's ability to generate profits, the less it encourages companies to be more detailed in disclosing information, including intellectual property. The minimal profit impact on ICD is also caused by the company's lack of awareness that currently more and more companies are able to generate profits, so companies must do something that can differentiate them from other companies.

According to stakeholder theory, who argue that all stakeholders have the right to learn about corporate actions that impact them. Disclosure of company information, including disclosure of intellectual property is not affected by the amount of profit generated by the company. This study is in line with studies conducted by (Aprisa et al., 2016; Azzahro, 2019; Dewi et al., 2020; Dwipayani & Putri, 2016; Faradina, 2016; Susanti, 2016) which show that profitability no effect on ICD. However, this study is not in line with other studies conducted by (E. S Asfahani, 2017; Ashari & Putra, 2016b) show that profitability has an impact on ICD.

Impact of Firm Age on ICD

The fourth hypothesis states that a certain age has an effect on ICD according to the results of the hypothesis test. The age of the company indicates that the company still exists, is competitive and can take advantage of business opportunities in the economy. By knowing the age of the company, it can be seen how long the company can survive in business. As the company ages, more comprehensive information including intellectual property disclosure tends to be disclosed, because detailed information disclosure can add to company value and attract the attention of the wider community. On the other hand, when the IPO age is young, someone tries to get more capital by disclosing more company information, including intellectual capital.

The age of the company is the beginning of the company's activities until the company can maintain its existence (going company) in commercial life. The older the age of the company, the more visible the existence of the company. In this case more and more disclosures are made to give outsiders confidence in the quality of the company (A Nugroho, 2012). Long-lived companies tend to be large companies that already have many investors and are able to survive in their business, making it possible to implement ICD (Febrina, 2015). Compared to younger organizations. Older companies often disclose intellectual capital at a higher level. Companies that have been in business for a long time tend to have expertise in preparing financial reports. Make them aware of the need to properly report their intellectual property.

The results of this study are in line with researchers (Delvia & Alexander, 2019; Luthan et al., 2018; Novrian et al., 2020) who found that increasing company age affects disclosure of intellectual capital. (A Nugroho, 2012) explains that based on the aging business agency theory, mandatory reporting is more effective. The results of this study are not in line with research (Gregory et al., 2007) which shows that company age has no effect on ICD.

Impact of Independent Commissioners on Disclosure of Intellectual Capital

The fifth hypothesis states that the independent commissioner has no effect on the disclosure of intellectual property rights. This means that the independent commissioner has no influence on intellectual capital disclosure. The results of this study are not in line with previous researchers (Dwipayani & Putri, 2016; Monica Joson & Susanti, 2015) who found that independent commissioners have an impact on disclosure of intellectual capital. In accordance with the objectives of implementing a corporate governance system, the existence of an independent official must monitor and control management activities in managing the company. The results of this study indicate that independent commissioners have no effect on intellectual capital, indicating that while management is controlled by independent commissioners, the management and disclosure of
intellectual capital resources is not implemented properly. It can be assumed that commissioners are ineffective and weak in supervision.

According to agency theory, states that the more independent commissioners, the more information is disclosed. The number of off-site officers tends to be more independent because they do not have many conflicts of interest with senior management. This research contradicts agency theory, because the existence of an independent commissioner must support the principles of independence and accountability in disclosing intellectual capital. (Dwipayani & Putri, 2016) argues that a high proportion of independent commissioners does not guarantee that the company's interests are adequately protected. This shows that the role of independent commissioners in carrying out their duties and responsibilities under the supervision of company directors has not been implemented optimally.

In addition, the reason for the lack of impact is because the appointment of independent commissioners is only intended to comply with Indonesian regulations on good corporate governance and because in practice management prioritizes the interests of the owners over the optimization of intellectual capital. It seems that the independent commissioner only meets the required criteria and is a good company, governance, and the ineffective role of the independent commissioner within the company as a supervisory tool. This is because the role of the independent commissioners is to monitor the running of the business while the directors make and carry out decisions. So that management does not necessarily increase the ICD as a result of the establishment of an independent commissioner. This study supports the study of (Morin et al., 2019) which shows that independent commissioners have no impact on ICD.

**Company Size Impact, leverage, Profitability, Company Age and Independent Commissioner Simultaneously Against ICD**

According to the findings of the simultaneous test. all independent variables (company size, leverage, profitability, firm age and independent commissioners) together affect the dependent variable. namely the ICD. The findings of this study are consistent with those of (Bohalima et al., 2021; Lubis & Ovami, 2020) who used independent variables to examine the simultaneous impact of ICD on firm size, company age, profitability, leverage, and independent commissioners.

**CONCLUSION**

Based on the results of the tests that have been carried out, it was found that partially company size has an impact on intellectual capital disclosure, leverage has an impact on ICD however, profitability has no impact on ICD and company age has a good and quite large impact on intellectual property disclosure whereas, independent commissioners have no impact on ICD in financial sector companies listed on the IDX for the 2020–2021 period. And simultaneously, it was found that firm size, company age, profitability, leverage, and independent commissioners have an impact on ICD.

**SUGGESTION**

**Practical Advice**

The practical advice in this study is for investors. to consider the company's ICD. Because the company's ICD is getting better, it will reflect the good leverage and profitability of the company.

**Theoretical Suggestions**

And the theoretical suggestions in this study are for further studies to add other independent variables such as type of industry, industrial base. length of listing on IDX and intellectual capital performance as well as adding years of study observation.

**REFERENCE**


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