THE EFFECTS OF INDEPENDENT COMMISSIONER, MANAGERIAL OWNERSHIP, FOREIGN OWNERSHIP, AND PROFITABILITY ON INTELLECTUAL CAPITAL

Patricia Nikita Yonata¹, Liana Susanto¹*

¹Faculty of Economics and Business, Universitas Tarumanagara, Jakarta - Indonesia
*Email: lianas@fe.untar.ac.id

Submitted: 03-04-2023, Revised: 01-06-2023, Accepted: 07-07-2023

ABSTRACT
This research is designed to determine the factors that affect intellectual capital in Indonesia's manufacturing companies listed on its stock exchange. The research period is from 2018-2020. In this research, 31 manufacturing companies were taken as samples by the purposive sampling method. The research data were analysed using multiple linear regression analysis techniques. Profitability has a significant positive effect on intellectual capital, as shown by the results of this research. Intellectual capital is not significantly affected by independent commissioner, managerial ownership and foreign ownership.

Keywords: independent commissioner, managerial ownership, foreign ownership, profitability, intellectual capital

1. INTRODUCTION

The economy in Indonesia continues to experience development and movement, where challenges for business people can arise internally and externally. For the company itself, internal challenges can be challenges that arise from the management of the company itself. The economic condition of the country is one of the external challenges that has quite an impact on the company. Tight competition makes companies required to continue to improve company performance in order to achieve company goals [1].

In order to achieve goals, a company certainly needs a competitive advantage that can be used to win competition between other companies. In the current era, companies must realize that in order to survive in competitive competition, companies cannot rely only on physical development, but innovation, information technology and human resource knowledge or can be referred to as intangible assets are important factors that must be owned by companies in adding value to the company. Intangible assets are the unique skills of a company's human resources, knowledge, patents and others [2]. These assets can be converted into value and generate competitive advantage for companies, organizations or countries. These intangible assets can also be referred to as intellectual capital, which has a significant impact on the economy [3]. In general, intellectual capital can be classified into three components, namely capital employed, human capital, and structural capital. In measuring how a company implements intellectual capital, it is called intellectual capital performance.

Independent commissioners are members of the board of commissioners who are not affiliated with the board of directors, other members of the board of commissioners and controlling shareholders, and are free from business relationships or other relationships that may affect their ability to act independently. Shareholders who have a position in the management of the company are referred to as managerial ownership. The existence of managerial ownership in the company can influence decisions, one of which is related to the quality of human resources.
and all other aspects in a company, this is directly related to several factors of intellectual capital [4]. Foreign ownership of the company has an interest in maximizing the profits of the company so that with this demand, the company must continue to develop the performance of the parties such as the quality of the workers who are directly related to the intellectual capital owned by the company [5]. Based on the background that has been described above it turns out that there are many factors that can affect intellectual capital. Therefore, the title of this research is “The Effect of Independent Commissioner, Managerial Ownership, Foreign Ownership, and Profitability on Intellectual Capital Among Manufacturing Companies Listed in Indonesia Stock Exchange During 2018-2020”

### Literature Study

#### Agency Theory

Agency theory is a theory that explains how the contractual relationship between company owners and management (agents). This relationship can arise because one party has a contract with another party and there is a delegation of authority in decision making. In this case, the party that gives the task is the owner of the company (principal) and the party given the task is the management [6]. The relationship between shareholders and managers in the company, which is an aspect of the company's intellectual capital, explains the pure agent theory where shareholders are principals and managers are agents. So that the existence of managerial ownership owned by agents in the company can be used as an alternative to minimize agency problems [7]. The existence of managerial ownership in the company makes the interests of management who are also shareholders and company owners as principals become aligned [6].

#### Signaling Theory

In most labor markets, an employer cannot be sure of a person's productive ability at the time of employment. So, workers must be able to provide signals or information that is acceptable and useful to employers and can reflect the level of productivity of workers [8]. Based on signal theory, there is information asymmetry between the company and the investor so that it is necessary to provide financial statement information to outsiders (investors). The existence of the company's financial statements can also reduce the possibility of outsiders giving a low price for the company [9]. High productivity of workers will improve the performance of intellectual capital and this can have a positive effect on the company's financial statements, which means that companies that have a high level of worker productivity will create favorable signals for company managers and investors [10].

#### Stakeholder Theory

Stakeholder theory explains that from the perspective of stakeholders, business is a set of relationships among groups that have a mutual interest in shaping business. According to stakeholder theory, the implementation and reporting of important company activities to stakeholders is expected from management. Productivity will create favorable signals for company managers and investors [11]. Stakeholder theory underlies the practice of intellectual capital performance efficiency, because of the relationship between company management and stakeholders who are part of intellectual capital. With the existence of an independent board of commissioners in the company that is not affiliated with the board of directors, other members of the board of commissioners and controlling shareholders, and free from business relationships or other relationships that might affect its capacity to act independently or act
solely in the interests of the company, it can be a neutral party that is expected to bridge the relationship that occurs between shareholders and company managers [12].

**Intellectual Capital**

Intellectual capital is part of the company's intangible assets that are used to create a competitive advantage and can be used as the company's added value if implemented properly [13]. Intellectual capital is defined as part of the company's value included in intangible assets which include human capital, organizational capital and social capital collectively [14]. Intellectual capital is the sum of what is produced by the three main elements of the organization (human capital, structural capital, customer capital) relating to knowledge and technology that can provide a competitive advantage for a company [15].

**Independent Commissioner**

Independent commissioners are stakeholders in the company who do not have a business relationship with shareholders or directors [16]. Independent commissioners are part of the company tasked with supervising and advising the performance of the board of directors objectively [17]. Independent commissioners are stakeholders who do not have direct authority over the company but can bridge the interests of the principal in a company. So it can be concluded, independent commissioners are commissioners who have no business ties with shareholders or directors and do not directly have authority in the company, but become advisors to the board of directors and bridge the principal's interests objectively in the company. According to stakeholder theory and [18] shows that the existence of independent commissioners has a positive effect on intellectual capital. From this thought, it can be concluded that the first hypothesis in this study is as follows:

**Ha1:** Independent commissioner has a positive and significant effect on intellectual capital.

**Managerial Ownership**

Managerial ownership is the level of share ownership by management who are actively involved in decision making and influence the value of a company [19]. Managerial ownership is the board of directors and commissioners who act as shareholders of the company and as management who participate in decision making [20]. Managerial ownership is the owner of company shares originating from management who participates in the decision making of the company concerned [21]. Therefore, it can be concluded that managerial ownership is part of the share ownership in a company owned by management parties, namely the board of directors and commissioners who are actively involved in decision making and influence the value of a company. Research conducted by [22] revealed that intellectual capital is positively influenced by the existence of managerial ownership in a company. From this explanation, it can be concluded that the second hypothesis proposed in this study is as follows:

**Ha2:** Managerial ownership has a positive and significant effect on intellectual capital.

**Foreign Ownership**

Foreign ownership can be defined as the portion of outstanding shares owned by foreign investors owned by individuals, legal entities, governments located outside the country against the entire amount of outstanding share capital [23]. Foreign shareholdings are shares owned by individuals, legal entities, governments, and all their parts that have foreign status [24]. In conclusion, foreign ownership is the number or portion of shares owned by all foreign parties,
whether individuals, legal entities or government institutions with foreign status. According to signaling theory and [22] found that the existence of a high level of foreign ownership in the company can hinder management to improve company performance in managing intellectual capital. From this explanation, it can be concluded that the third hypothesis in this study is as follows:

**Ha:** Foreign ownership has a negative and significant effect on intellectual capital.

### Profitability

Profitability is the ratio between profit and assets or capital used to generate that profit [25]. Profitability is the company's ability to generate profits [26]. Profitability is the result of capital investment in the company [27]. So it can be concluded, profitability is the company's ability to generate profits by utilizing assets or the results of the company's capital investment. Research conducted by [28] found that profitability has a positive effect on intellectual capital. From this explanation, it can be concluded that the fourth hypothesis in this study is as follows: **Ha:** Profitability has a positive and significant effect on intellectual capital.

### 2. RESEARCH METHOD

This research is a quantitative research. This study uses one dependent variable and four independent variables. The dependent variable in this study is intellectual capital, while the independent variables consist of independent commissioner, managerial ownership, foreign ownership, and profitability. This study uses secondary data obtained from the company's financial statements and the official website of the Indonesia Stock Exchange (www.idx.co.id). The population in this study includes manufacturing companies listed on the Indonesia Stock Exchange during 2018-2020 period. Sample selection was done using purposive sampling technique. In this technique, the sample is selected based on certain criteria. The criteria used for sampling are: a. Manufacturing companies listed on the Indonesia Stock Exchange during 2018-2020, b. Manufacturing companies that present audited financial statements ending on December 31 during 2018-2020, c. Manufacturing companies that earn profit during 2018-2020, d. Manufacturing companies that have managerial ownership during 2018-2020, e. Manufacturing companies that have foreign ownership during 2018-2020. From the results of sample selection based on the criteria above, there are 31 companies that meet the criteria as samples.

Intellectual capital is part of the company's intangible assets which include human capital, organizational capital and social capital related to knowledge and technology and can provide a competitive advantage for a company. Intellectual capital in this study is measured by the Value Added Intellectual Capital (VAIC). VAIC’s formula in the study is obtained by the sum result of human capital, structural capital and capital employed.

\[
VAIC = VACA + VAHU + STVA
\]

Independent commissioners are calculated by dividing the number of independent commissioners in the company divided by the total of all company commissioners.

\[
IC = \frac{\text{Number of Independent Commissioners}}{\text{Total of All Company Commissioners}}
\]
Managerial ownership is calculated by dividing the manager's share ownership by the company's total share ownership.

\[ MO = \frac{\text{Manager's Share Ownership}}{\text{The Total Share Ownership of The Company}} \]

Foreign ownership is proxied by dividing the share ownership of foreign parties in the company with the total share ownership of the company.

\[ FO = \frac{\text{The Share Ownership of Foreign Parties}}{\text{The Total Share Ownership of The Company}} \]

Profitability is proxied by Return on Asset (ROA), namely by dividing net profit before tax by total company assets.

\[ ROA = \frac{\text{Net Profit Before Tax}}{\text{Total Asset}} \]

Panel data, which is a combination of time series and cross section data, is used in this study. To determine the best model for estimating panel data, the data were tested by using the Chow test and Hausman test. Data testing in this study used multiple linear regression. Data analysis in this study includes descriptive statistical test, regression analysis test, coefficient of determination test, F test, and t test. The equation of the regression model in this study is as follows:

\[ VAIC_{it} = \alpha + \beta_1 IC_{it} + \beta_2 MO_{it} + \beta_3 FO_{it} + \beta_4 ROA_{it} + e \]

Description:

- \( VAIC \): Value Added Intellectual Capital
- \( \alpha \): Constant
- \( \beta_1 \text{ to } \beta_5 \): Regression coefficient
- \( IC \): Independent Commissioner
- \( MO \): Managerial Ownership
- \( FO \): Foreign Ownership
- \( ROA \): Profitability
- \( i \): i-th company
- \( t \): t-th period
- \( e \): Error

3. RESULTS AND DISCUSSION

The results of descriptive statistics are presented in Table 1 as follows:

<table>
<thead>
<tr>
<th></th>
<th>VAIC</th>
<th>IC</th>
<th>MO</th>
<th>FO</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.02219</td>
<td>0.25705000</td>
<td>0.13625800</td>
<td>0.25560000</td>
<td>0.07525600</td>
</tr>
<tr>
<td>Median</td>
<td>4.85155</td>
<td>0.25000000</td>
<td>0.04741000</td>
<td>0.14435000</td>
<td>0.05182000</td>
</tr>
<tr>
<td>Maximum</td>
<td>19.33616</td>
<td>0.57143000</td>
<td>0.89440000</td>
<td>0.93100000</td>
<td>0.46658000</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.16795</td>
<td>0.11111000</td>
<td>0.00000011</td>
<td>0.00007000</td>
<td>0.00053000</td>
</tr>
</tbody>
</table>
Based on the data presented in Table 1, it can be seen that the mean value of the intellectual capital variable (VAIC) is 6.02219, the median value is 4.85155, the standard deviation is 3.214983, the maximum and minimum values are 19.33616 and 2.16795, respectively. The mean value of the independent commissioner variable (IC) is 0.257050, the median value is 0.250000, the standard deviation is 0.086695, and the maximum and minimum values are 0.571430 and 0.111110, respectively. The mean value of the managerial ownership (MO) is 0.136258, the median value is 0.047418, the standard deviation is 0.231755, the maximum and minimum values are 0.894400 and 0.00000011, respectively. The mean value of foreign ownership variable (FO) is 0.2556, the median value is 0.14435, the standard deviation is 0.305852, and the maximum and minimum values are 0.931 and 0.00007, respectively. The mean value of the profitability variable (ROA) is 0.075256, the median value is 0.05182, the standard deviation is 0.079978, and the maximum and minimum values are 0.46658 and 0.00053, respectively.

The panel data model used to estimate the panel data in this study is the Fixed Effect Model (FEM). The results of data analysis in this study are shown in Table 2.

Table 2. The Results of Fixed Effect Model in Multiple Linear Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-4.507503</td>
<td>4.231532</td>
<td>-1.065218</td>
<td>0.2912</td>
</tr>
<tr>
<td>IC</td>
<td>5.045076</td>
<td>7.758630</td>
<td>0.650253</td>
<td>0.5181</td>
</tr>
<tr>
<td>MO</td>
<td>0.451147</td>
<td>0.282244</td>
<td>1.598428</td>
<td>0.1154</td>
</tr>
<tr>
<td>FO</td>
<td>-0.023754</td>
<td>0.027766</td>
<td>-0.855511</td>
<td>0.3958</td>
</tr>
<tr>
<td>ROA</td>
<td>0.490640</td>
<td>0.067824</td>
<td>7.233996</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Based on the results of multiple regression analysis in the table above, it can be concluded that profitability has a positive and significant influence on intellectual capital with a Prob (t-statistic) value of 0.0000. Independent commissioner has no significant effect on intellectual capital with a Prob (t-statistics) value of 0.5181. Managerial ownership has no significant effect on intellectual capital with a Prob (t-statistics) value of 0.1154. Foreign ownership has no significant effect on intellectual capital with a Prob (t-statistics) value of 0.3958.

The adjusted R-squared value of 0.815948 means that the variables of independent commissioner, managerial ownership, foreign ownership, and profitability can explain the variation in the company value variable by 81.5948% while the remaining 18.4052% variation in company value is explained by other variables that were not included in this study. Prob (F-statistics) value of 0.0000 means that the variables of independent commissioner, managerial ownership, foreign ownership, and profitability have a simultaneous growth of company’s intellectual capital.

Source: EViews Version 12 SV
Independent commissioners have no significant effect on intellectual capital. Based on stakeholder theory, the existence of an independent board of commissioners that is not affiliated with management and free from business relationships can be a party that prioritizes the interests of shareholders and continues to strive to improve the efficiency of aspects of intellectual capital. However, in practice, independent commissioners will be more likely to fulfill the needs of shareholders and ignore the internal interests of the company, which also includes aspects of intellectual capital. Some companies also only have a small number of independent commissioners, which shows that independent commissioners cannot influence managerial decisions in the process of managing intellectual capital aspects. This result is supported by the researches of [12] which proved that independent commissioner does not have a significant impact on intellectual capital. However, they contradict the results of [29] which states that independent commissioner affects intellectual capital significantly in a positive direction. They also contradict the result of [18] which proved that independent commissioner has a negative and significant influence on intellectual capital.

Managerial ownership have no significant effect on intellectual capital. Managerial ownership in the company tends to have a positive influence on intellectual capital performance because the company's management team will take corrective action, improving the efficiency of the performance of all parts of the company. But in the reality, it is not always like that, managers who are shareholders can also have a tendency to regulate aspects of intellectual capital for their own interests because managers act as agents and principals simultaneously so that the presence of managers as shareholders cannot significantly affect the management of intellectual capital. This result is supported by the researches of [30] which proved that managerial ownership does not have a significant effect on intellectual capital. However, they contradict the results of [29] which states that managerial ownership affects intellectual capital significantly in a positive direction. They also contradict the result of [18] which proved that managerial ownership has a negative and significant influence on intellectual capital.

Foreign ownership has no significant effect on intellectual capital. Foreign ownership in the company cannot significantly motivate management to improve the company's performance in managing intellectual capital due to differences in governance culture and foreign investors cannot directly monitor the company's management performance. This result is supported by the researches of [22] which proved that independent commissioner does not have a significant effect on intellectual capital. However, they contradict the results of [31] which states that foreign ownership affects intellectual capital significantly in a positive direction. They also contradict the result of [32] which proved that foreign ownership has a negative and significant influence on intellectual capital.

Profitability has a positive and significant influence on intellectual capital. In maintaining a good relationship between agent and principal, the company needs to incur bonding costs or rewards resulting from an increase in the company's profitability. So, when profitability increases, of course the rewards given will also increase and affect the growth of aspects of intellectual capital. This result is supported by the researches of [33] which proved that profitability affects intellectual capital significantly in a positive direction. However, they contradict the results of [28] which states that intellectual capital is not significantly affected by profitability.
4. CONCLUSIONS AND RECOMMENDATIONS

Independent commissioner has no significant impact on intellectual capital. In practice, independent commissioners will be more likely to fulfill the needs of shareholders and ignore the internal interests of the company, which also includes aspects of intellectual capital. Managerial ownership has no significant impact on intellectual capital. In the reality, managers who act as executive and shareholders have a tendency to regulate aspects of intellectual capital for their own interests because managers act as agents and principals simultaneously so that the presence of managers as shareholders cannot significantly affect the management of intellectual capital. Foreign ownership has no significant effect on intellectual capital. Foreign ownership in the company cannot significantly motivate management to improve the company's performance in managing intellectual capital due to differences in governance culture and foreign investors cannot directly monitor the company's management performance. Profitability has a significant effect on intellectual capital. The greater the level of profitability, the higher the efficiency of intellectual capital. When profitability increases, of course the rewards given will also increase and affect the growth of aspects of intellectual capital.

ACKNOWLEDGMENT

This work was supported by Universitas Tarumanagara. We thank Mr. Hendro Lukman, as the Head of the S1 Accounting Study Program, Faculty of Business Economics, Universitas Tarumanagara. We also thank The ICEBM UNTAR 2022 Organizing Committee for successfully organizing this event.

REFERENCES


