

Intellectual Capital Disclosure and Post-Pandemic Market Performance in the Manufacturing Industry

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Abstract. Currently, the condition of Indonesia's manufacturing industry is experiencing major problems, not only the existence of an international trade war, but also the outbreak of COVID-19 causing a volatile stock market. This study aims to examine the effect of Intellectual Capital Disclosure (ICD) on market performance directly or with profitability as a mediator. ICD shows the role of industrial innovation and infrastructure in achieving the ninth goal of the Sustainability Development Goals (SDGs). The study's population was all manufacturing companies in Indonesia with a total sample of 64 companies for 5 years of research (2015-2019). Secondary data were obtained from annual reports taken from the official website of the Indonesia Stock Exchange. Data collection technique was content analysis for ICD indicators. The method of analysis was using Smart PLS. The results showed that ICD has an influence on market performance and profitability was proven to mediate.

Keywords: Content Analysis, Intellectual Capital Disclosure, Market Performance, COVID-19 Pandemic, Profitability

1 Introduction

Market performance is a measurement of a management's success in managing business ventures [1][2][3][4]. The measurement of market performance for companies listed on the Indonesia Stock Exchange can be reflected in the market value of the traded shares [5][6].

Research related to market performance is important because the stock market conditions are quite volatile [7][8]. There are external and internal factors that influence market performance. External factors such as the macro economy, and even the world's problems today—the COVID-19 pandemic—also influence market performance [9]. These factors can be said as uncontrollable factors. However, there are internal factors that tend to be controllable by the company, such as financial performance. Because internal factors are controllable, this study is limited to research on internal factors that affect company performance.

Another factor that is predicted to influence market performance is Intellectual Capital (IC). If the company has an IC and manages it well, it will have an impact on the company's market value [10][11]. In addition, if IC is a valuable resource for competitive advantage, then it will contribute to the company's performance in terms of both financial performance and market performance [12][13]. In communicating IC to stakeholders, of course the financial reporting media is the main thing. The company will disclose the IC in its annual report.

Although still voluntary, the level of urgency is currently very high for users of financial statement information in making decisions, especially investors. Therefore, this research is paramount to prove the influence of Intellectual Capital Disclosure (ICD) on market performance.

The purpose of this research is to provide empirical evidence that ICD has an influence on market performance. Second, the research provides empirical evidence that profitability, which is part of financial performance measurement, mediates the influence of IC on market performance.

This research also provides several benefits. First, this research adds a reference to the ICD research on market performance in the manufacturing industry in Indonesia. This study limits on the manufacturing industry because the manufacturing industry is the main growth engine that dominates companies listed on the Indonesia Stock Exchange (IDX) as well as an industry that can absorb more labor than other sectors. Therefore, the manufacturing sector is expected to continue to grow so that economic growth continues to rise [14].

The weakening of the manufacturing industry and economic growth cannot be separated from external factors. As we know, the current global situation is full of uncertainty with the existence of trade war between the United States (US) and China, indirectly resulting in a decreased demand for production in Indonesia [15]. In addition, the condition is exacerbated by the existence of COVID-19 pandemic that swept the world from across sectors, due to the suggestion to carry out personal quarantine and travel restrictions [16].

A number of studies have examined the influence of ICD on company performance [17][18][19][31], the influence of ICD on profitability [20][21][22][3][23][32][33] and profitability to company value [24][13][34][35]. However, there are still gaps between those that explain there are positive, negative, or whether there is no influence. Each of these studies is very interesting to study and prove empirically because: (1). There is still a gap in results as previously explained; (2). The manufacturing industry is currently shaking; (3). ICD in Indonesia is still voluntary, but their urgency is increasing.

2 Literature Review

2.1 Market Performance

In this study, Tobin's Q is used in measuring market performance because Tobin's Q represents a picture of management's performance in managing funding sources to finance company assets measured by market value in its equity [25][26].

$$Tobin's\ Q = \frac{(MVE + D)}{TA}$$

2.2 Intellectual Capital Disclosure (ICD)

ICD is a report issued by a company that aims to meet the information needs of stakeholders [27]. According to Ulum [28], Intellectual Capital Disclosure (ICD) is divided into 3 categories of disclosure sizes, i.e. human capital consisting of 8 items, structural capital disclosure consisting of 15 items, and relational capital disclosure consisting of 13 items.

2.3 Profitability

In this study, the formula used is ROA measured by net income divided by total assets [29].

$$ROA = \frac{\text{Net Income after tax}}{\text{Total Asset}}$$

2.4 Hypothesis Submission

Based on the resource-based theory proposed by Bontis and Richardson[30], the resources possessed both tangible and intangible have the potential to create excellence that will encourage the formation of competitive advantage. This is a strategy for companies to win a business competition. Advantages derived from these resources will improve market performance. The intended advantage of these intangible resources is IC. ICD has a paramount role in improving market performance because it affects the positive perception of investors in decision making through the information presented in the financial statements.

H1: there is an influence of ICD on market performance

The existence of ICD will increase profitability because with ICD it means that the company has increased its intangible asset capability within the company as much as possible. With an increase in IC, it causes an increase in the effectiveness and productivity of owned resources. Thus, the company's profits will also increase.

H2: there is an influence of ICD on profitability

Profitability tends to improve market performance because companies that have high ROA will signal that management performance is good and attracts investors' attention. This has an impact on increasing share prices and a positive impact on market performance as measured by Tobin's Q. This is in line with the results of Prima et al.'s study [13].

H3: there is an influence of profitability on market performance

ICD will have an influence market performance because the information revealed in the annual report gives confidence to stakeholders, especially investors, about the company's capabilities in managing its resources. However, if analyzed indirectly, ICD will affect the profitability of the company because of the maximization of the resources owned by the company. An increase in profitability will influence market performance through an increase in stock prices. This is due to investors being attracted to companies that have high profitability[32][20][36][24].

H4: ICD has an influence on company value with profitability as a mediating variable.

3 Method

The subjects of this study were manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 period. Various visibility reports can be accessed properly through the site as a database through a cloud computing system [37]. The use of data presented to the public is strived to have systemized access eligibility [38] and connectivity between users through a qualified network management to produce data availability [39]. Data availability in the system understood in the realm of Information and Communication Technology (ITC) certainly needs to also be understood by its readability for users, especially in the industry [40]. This readability is also used as secondary data and data collection techniques is using literature study and content analysis (CA) in making ICD scores. [41].

4 Results and Discussion

4.1 Measurement Model (Outer Model)

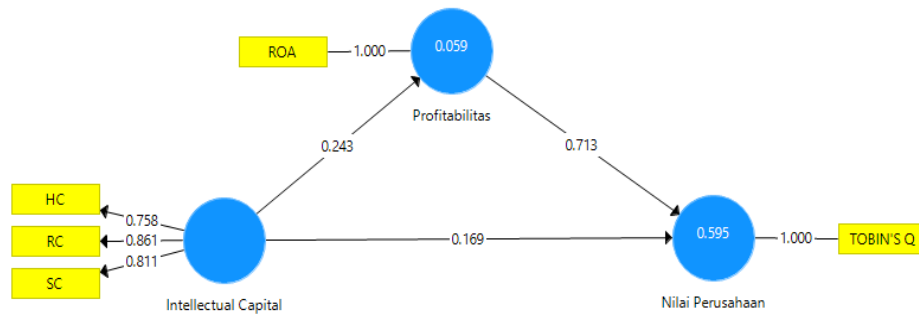


Fig.1. Measurement Model (Outer Model)

Source: Data were processed using SmartPLS 3.0

Test conducted on the outer model is Convergent Validity. From Figure 1., it can be seen that all loading factor values of each latent variable are above 0.6. This means that there is no loading factor problem [42].

4.2 Structural Model (Inner Model)

Evaluation of inner models can be done in three ways, i.e. by looking at R², Q², and GoF.

Table 3. Presentation of Discriminant Validity Results

	R Square	R Square Adjusted
Value of Company	0.605	0.694
Profitability	0.259	0.256

Source: Data were processed using Smart PLS 3.0

The resulting R²;Q² and GoF are at high level value (0.694;0.6177;0.7336)so this model can be said as good for predicting. Therefore, hypothesis testing can be done.

4.4 Hypothesis testing

A variable is said to have an influence on other variables if the p-value of the relationship/path is below 0.05.

Table 4. Presentation of Path Coefficients Results

	Original sample	T Statistic	P value
ICD – Market performance	0.169	3.662	0.000
ICD – Profitability	0.243	4.444	0.022
Profitability – Market Performance	0.713	11.601	0.000

Source: Data were processed using Smart PLS 3.0

From the table above, it can be concluded that there are: (1) an influence of ICD on market performance; (2) an influence of ICD on profitability; (3) an influence of profitability on

market performance; and (4) an influence of ICD on market performance with profitability as a mediator.

This explains that the information revealed in the annual report related to IC has an influence on stakeholders, especially investors so that the stock price rises in line with stakeholder theory [12]. Therefore, ICD needs to be the concern of the company to stimulate market performance through market prices. This is because ICD is an internal factor that can be controlled by the company.

It is proven that ICD influences profitability. Companies that improve ICD certainly have an increase in the quality of IC that encourages the effectiveness of strategy and resource productivity. Therefore, this condition encourages profitability.

It can be stated that profitability has a significant effect on market performance, so that H3 is accepted. Companies that have a high profitability ratio tend to receive stakeholder confidence so that the value of the company will increase.

The influence of ICD on market performance with profitability as a mediator to see whether profitability is able to mediate the relationship between ICD according to [43] and [44], is acquired by multiplying the loading factor of ICD on profitability and loading factor profitability on market performance, so the results obtained 0.173. Then, these results are compared with the results of loading factor and the relationship between ICD with market performance which shows the results of 0.169. From this comparison it can be stated that there is an indirect relationship (value $0.173 > 0.169$) so that profitability is proven to mediate.

5 Conclusion

From the results of this study, it appears that ICD influences market performance either directly or through profitability as a mediator. This is because the ICD increases investor confidence both because of a transparency in the ability of the management in the resources management as well as an increase in effectiveness and productivity that encourages increased profits and ultimately stock prices. Therefore, further research can actually analyze the manufacturing companies, i.e. what are the factors that encourage companies to make disclosure of the current intellectual capital. For companies, they are expected to pay attention whether the ICD is in line with the 9th goal in the SDGs. Although the ICD is still voluntary, it is proven that the urgency is quite high in improving management performance and the information conveyed through financial statements will be beneficial to stakeholders, especially investors, to make investment decisions.

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