

# The Influence of Intellectual Capital on The Profitability and Value of Banking Companies Listed on The Indonesian Stock Exchange

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**Abstract.** This research aims to test and obtain empirical evidence regarding the influence of intellectual capital on the profitability and value of banking companies on the IDX. The sample for this research is banking companies listed on the Indonesia Stock Exchange (BEI) for the 2019-2021 period. The data analysis technique used is the Partial Least Square analysis technique. The results of this research indicate that intellectual capital has a positive effect on the profitability and value of banking companies. Financial performance as a mediator can strengthen the relationship between intellectual capital and company value. This shows that the better the intellectual capital managed by the company, such as human capital, structural capital, customer capital, the better the company's performance and company value, thereby attracting the attention of investors.

**Keywords:** Intellectual Capital, Profitability, Company Value.

## 1 Introduction

A company will always try to run its business or business as well as possible. One of the efforts is to become a company listed on the IDX and become a company that goes public so that the company can run well and smoothly. Banking companies are a tool for the government and the private sector to support economic growth in a country. Banking is all activities related to or related to banking, such as channeling funds through credit or loans and raising funds. As a trusted community institution, banks or banks must be able to maintain the trust of the public (Bank Indonesia, 2020). Every company or business owner will always show potential investors that their business is the right investment alternative, so that if the company does not give a good signal about the company's value, then the company's value will be higher or lower than its actual value. One technique and reference for investors to find out stock movements is to use Price to book value (PBV). This ratio is one of the financial ratios most widely used by investors, PBV or Price to book value is the ratio of the stock market price to the book value per share (Riadi, 2021). Business people are starting to realize and know that competitive ability is

not only found in tangible assets, but intangible assets are also an important factor in obtaining company performance and corporate sustainability.

Intellectual capital is a very valuable asset in the modern business world. Intellectual Capital is a resource concept based on intangible assets that is used optimally in carrying out the company's strategy effectively and efficiently, so that it can be used as a company competency tool in increasing competitive advantage (Pulic,1998). Research conducted by Handayani (2015) found that intellectual capital has a positive and significant effect on company value. However, research by Wulandari, et al (2018) and Puspitasari (2020) found that intellectual capital has no significant effect on company value.

Research conducted by Kurniawan (2019), Purnomo (2016), and Cahyani, et al (2015) found that intellectual capital had a significant positive effect on profitability. However, research by Islamadonna et al (2021) found that intellectual capital does not have a significant effect on profitability. In 2020 banking shares in Indonesia experienced quite a large correction. This can be seen from the performance of the financial sector index which fell by 4.14% since the beginning of the year, which has an impact on company value. This decline occurred in several banking sectors such as shares of PT. Bank Mandiri Tbk (BMRI) which experienced a decline of 8.33% at IDR 5,775 per stock, shares of PT. Bank Rakyat Indonesia Tbk (BBRI) experienced a correction of 7.58% at IDR 3,410 per stock, PT shares. Bank Central Asia Tbk (BBCA) also experienced a correction of up to 5.38% touching a price of IDR 31,225 per stock and PT. Bank Negara Indonesia Tbk (BBNI) fell to 5.18% at IDR 5,025 per stock. This decline could occur due to the ratio of non-performing loans increasing due to the pandemic, as well as government and central bank policies. Based on the phenomenon that occurred and the results of previous studies where there were still differences in research results, the researchers were interested in reviewing the Effect of Intellectual Capital on Profitability and Value of Banking Companies listed on the IDX.

## **2 Literature Review**

### **1. The Effect of Intellectual Capital on Company Performance**

In improving financial performance, a company can utilize its intellectual capital by managing human resources (human capital). This can also support company infrastructure (structural capital) and company services to customers (customer capital). If the company can manage intellectual capital well, then the company can create added value so that it can affect profitability. The greater the value of intellectual capital, the more efficient the use of company capital will be, thereby increasing the added value for the company. So that the use of intellectual capital on company performance can improve and facilitate profits (profits) for the company.

H<sub>1</sub>: Intellectual Capital has a positive effect on Company Performance.

### **2. The Influence of Intellectual Capital on Company Value**

The company's value will grow sustainably if the company pays attention to economic, social and environmental dimensions because sustainability is a balance between the interests of the economy, environment and society. Intellectual capital elements are able to

become indicators of market assessment of company value. The intellectual capital element of human capital is very influential on companies, where the intelligence and creativity of employees in a company will create the best solutions for the company which will increase market appreciation of the company's performance, thereby increasing market value. So the higher the intellectual capital that can be fulfilled by the company, the higher the utilization of intellectual capital will be to the company's value which can be an added value for the company.

H<sub>2</sub>: Intellectual Capital has a positive effect on Company Value.

### 3. The Influence of Company Performance on Company Value

Company performance is a picture of a company's financial condition. One of the financial performance ratios that can assess a company's profit is profitability. With a high profitability ratio owned by a company will attract investors to invest in the company. So the better the utilization of company performance or profitability, the higher the company value obtained. This provides a profitable prospect or positive signal for the future, thereby increasing the confidence of investors and stakeholders.

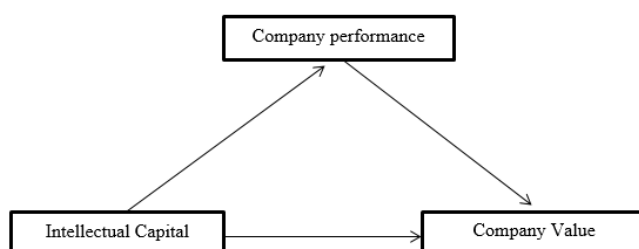
H<sub>3</sub>: Company performance has a positive effect on company value.

### 4. The Influence of Intellectual Capital on Company Value with Financial Performance as a mediator

Good and high company value is also often associated with the company's financial performance. The financial performance that greatly influences company value is the profitability ratio. Intellectual capital as an integral part of a company will be able to create efficiency in the use of company resources. In addition, the existence of intellectual capital in a company will create advantages so that later it will attract investors to invest in the company and will ultimately increase the value of the company itself. So it can be concluded that, the higher the intellectual capital, the firm value will increase when the company's profitability increases.

H<sub>4</sub>: Intellectual capital can influence company value with financial performance as a mediator.

Based on theory and studies of previous research results, the research conceptual framework is as in Figure 1.



**Figure 1: Conceptual Framework**

### 3 Methodology

This research was conducted on banking companies on the IDX for the 2019-2021 period with a population of 46 companies. The technique used in sampling using purposive sampling method with a total sample of 21 companies. The sample selection criteria in this research are (1) the banking company is registered on the IDX during the 2019-2021 period, (2) the company has financial reports and notes on financial reports during the 2019-2021 period, (3) the company has complete data regarding variables (Intellectual Capital, Company Performance and Company Value) during the 2019-2021 period, (4) The company uses the rupiah currency during the 2019-2021 period. The data analysis technique used in this study is Partial Least Square. Partial Least Square is used as an analytical tool for small sample sizes.

### 4 Results and Discussion

Summary of validity and reliability test results as in Table 1.

**Table 1. Test the Validity and Reliability**

| Variable             | Outer loading | Average Variance Extracted (AVE) | Composite Reliability | Cronbach's Alpha | Explanation        |
|----------------------|---------------|----------------------------------|-----------------------|------------------|--------------------|
| Intellectual Capital |               |                                  |                       |                  |                    |
| CEE                  | 0,926         | 0,757                            | 0.903                 | 0.838            | Valid and Reliable |
| HCE                  | 0.828         |                                  |                       |                  |                    |
| SCE                  | 0,853         |                                  |                       |                  |                    |
| Company performance  |               |                                  |                       |                  |                    |
| CR                   | 0,795         | 0,664                            | 0.887                 | 0.831            | Valid and Reliable |
| ROA                  | 0,764         |                                  |                       |                  |                    |
| TATO                 | 0,901         |                                  |                       |                  |                    |
| DER                  | 0,792         |                                  |                       |                  |                    |
| Company Value        |               |                                  |                       |                  |                    |
| PBV                  | 0,956         | 0,911                            | 0.953                 | 0.902            | Valid and Reliable |
| PER                  | 0,952         |                                  |                       |                  |                    |

**Table 2. Value Coefficients of Rsquare**

| Variable            | R Square | R Square Adjusted |
|---------------------|----------|-------------------|
| Company performance | 0.373    | 0.366             |
| Company Value       | 0.631    | 0.624             |

Based on Table 2 above, it shows that the R-Square value of the company performance variable is 0.373, which means that the intellectual capital variable is able to explain 37% of company performance and the remaining 63% is not explained in this research. Meanwhile, the R-Square value of the company value variable is 0.631, which means that the intellectual capital variable is able to explain 63% of company value and the remaining 37% is not explained in this research.

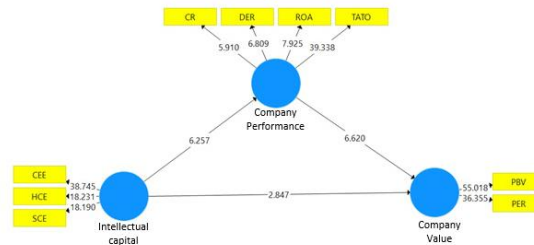
The formula  $Q^2$  is :

$$Q^2 = 1 - (1 - R^2_1)(1 - R^2_2) = 1 - (0,627)(0,369) = 1 - 0,231363 = 0,769$$

The results of the Predictive Relevance ( $Q^2$ ) calculation were obtained at 0.769. This shows that the contribution of intellectual capital variables and company performance to company value is 0.76 or 76%. Meanwhile, the remaining 24% is the contribution of other variables not included in this model.

## Discussion

The results of hypothesis testing are shown in Figure 2 and Table 3 below.



**Figure 2: SmartPLS Output Results**

**Tabel 3. Path Coefficients**

|                | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ( O/STDEV ) | P Values |
|----------------|---------------------|-----------------|----------------------------|--------------------------|----------|
| IC -> KP       | 0.611               | 0.602           | 0.098                      | 6.257                    | 0.000    |
| IC -> NP       | 0.270               | 0.252           | 0.095                      | 2.847                    | 0.005    |
| KP -> NP       | 0.600               | 0.609           | 0.091                      | 6.620                    | 0.000    |
| IC -> KP -> NP | 0.366               | 0.368           | 0.088                      | 4.166                    | 0.000    |

Based on the path coefficient results in Table 3,

### 1. The influence of intellectual capital on company performance

Based on the results of the analysis, the T-Statistics were obtained at  $(6.257 > 1.96)$  and P-Values at  $(0.000 < 0.05)$  while the results from the original sample estimate were 0.611. This shows that the hypothesis  $H_1$  is accepted, this means that the intellectual capital variable has a positive effect on company performance. Intellectual capital is a factor that is able to increase company performance by managing human resources (human capital), supporting company facilities or infrastructure (structural capital) as well as market needs and desires so that they can have good relationships with outside parties (customer capital).

### 2. The influence of intellectual capital on company value

Based on the results of the analysis, the T-statistic was  $(2.874 > 1.96)$  and the P-value was  $(0.005 < 0.05)$ , while the results from the original sample estimate were 0.270. This shows that the hypothesis  $H_2$  is accepted, it can be concluded that the intellectual capital variable has a positive effect on company value. In connection with the intellectual capital element which can be an indicator of market assessment of company value. Investors will give appreciation to companies that can apply intellectual capital well as added value to the company. Intellectual capital is based on knowledge and the economy, this can be in the form of employee skills, infrastructure that supports employee performance and the relationship between the company and service recipients.

### 3. The influence of company performance on company value

T-Statistics were obtained at  $(6.620 > 1.96)$  and P-Values at  $(0.000 < 0.05)$  while the results from the original sample estimate were 0.600. This shows that the  $H_3$  hypothesis is accepted, it can be concluded that the company's performance variable has a positive effect on firm value. The most prominent company performance ratio in a financial statement is the profitability ratio.

The higher the profit generated by a company, this can reflect the company's ability to obtain high profits for shareholders. An increase in profits can provide a good and positive signal to shareholders or investors, with that, the company can attract investors' interest in investing their capital in the company. The better the utilization of company performance and profitability in a company, the higher the company value obtained.

4. The influence of intellectual capital on company value with company performance as a mediator

Based on the analysis, the T-statistic was ( $4.166 > 1.96$ ) and P-value was ( $0.000 < 0.05$ ), while the results from the original sample estimate were 0.366. This shows that the  $H_4$  hypothesis is accepted, it is concluded that the intellectual capital variable has a positive effect on firm value through firm performance. Company performance can strengthen the relationship between intellectual capital and company value. Intellectual capital is an intangible asset owned by a company that is used by the company to increase its competitive advantage. This advantage will later become a company resource in increasing and attracting investors to invest in the company.

## 5 Conclusion

Based on the analysis, it can be concluded that intellectual capital has a positive effect on company performance and company value. Company performance has a positive effect on company value. Company and financial performance can strengthen the relationship between intellectual capital and company value. The advice given is to carry out further research to find effective ways to find out all banking financial reports and consider external factors that influence company value such as inflation rates, interest rates and currency exchange rates. It is recommended that further research use broader research objects, not only banking companies, but also companies in other sectors listed on IDX such as the manufacturing, mining, food and beverage sectors and others. These variables will have the same influence on company value and company performance in different sectors.

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