# The Effect of Intellectual Capital and Disclosure on the Value and Performance of Islamic Banking in Indonesia

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**Abstract.** This study aims to analyze the effect of intellectual capital and intellectual capital disclosures on corporate value and performance of the Sharia Banks In Indonesia. The sample used in this study is a company that reported annual reports and ICMD listed on the Indonesia Stock Exchange. The statistical method used is Partial Least Square, with a hypothesis testing the value of the t statistic. The result shows that intellectual capital and disclosures positively and significantly impact value and the Company's performance. However, the disclosure of intellectual capital has no significant effect on the Company's performance.

Keywords: Intellectual Capital; Intellectual Capital Disclosures; Company Value; Company Performance.

## **1** INTRODUCTION

The development of Islamic banking is very rapid today. This also shows that the development of the Islamic economy in Indonesia as a social movement has begun to indicate real success. As the main mover of financial institutions, Islamic banks become the locomotive for developing the theory and practice of Islamic economics in depth [2]. The main problem of Islamic banking is how the quality of the performance of existing Islamic banks. Islamic banks must be able to provide optimal benefits for the community. The roles and responsibilities of Islamic banks as Islamic financial institutions are not only limited to the financial needs of various parties, but the most important thing is the certainty that all activities carried out by Islamic banks follow sharia principles [14].

Currently, the financial aspect is no longer one of the measuring tools to determine banking performance. However, non-financial elements are also very influential in this modern era. Some non-financial aspects include corporate governance, intangible assets, Intellectual Capital, and other performance measures. This can be exemplified if the Company aims to increase profit creation. This requires good service and relationships with customers. Good service will satisfy customers so that they will be loyal.

Intellectual capital (IC) is necessary because the intangible value creation must receive sufficient attention. However, this greatly impacts the Company's performance [36]. He further states that tangible forms, such as income, depending on intangible value creation conditions. IC is a strategic aspect that can direct companies to gain and maintain a sustainable competitive advantage [39]. Therefore, the measurement of intellectual capital performance allows companies to monitor which parts need to be improved on the IC aspect, with the Company's goal of generating greater profits in the future [18].

In Indonesia, IC began to develop, especially after the emergence of PSAK No. 19 (revised 2010) on intangible assets. Although not explicitly stated as an IC, to some extent, IC has received attention. According to PSAK No. 19, intangible assets are non-monetary assets that can be identified, have no physical form, and are held for use in producing or delivering goods or services rented out to other parties or for administrative purposes [15].

Although PSAK 19 (revised 2010) implicitly mentions that IC has been introduced since 2000, in practice, IC is still not widely known in Indonesia [37]. Companies in Indonesia tend to use conventional bases in building their businesses, so the products they produce are still technologically poor. In addition, these companies have not paid more attention to human capital, structural capital, and customer capital which are elements of the Company's IC building [30].

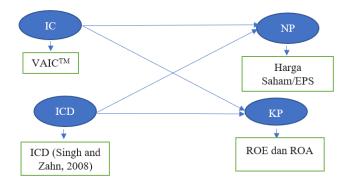
Islamic banks are in the midst of the era of information technology development, thus triggering the growth of interest in intellectual capital. Islamic banks have become part of modern business, where intellectual capital will be a precious asset for Islamic banks. However, no research in Indonesia examines intellectual capital's influence on Islamic commercial banks' business performance.

## 2 METHODOLOGY

Determination of the sample in this study is to use a purposive sampling model where the researcher has certain criteria. The purposive sampling method means that the population to be sampled in this study is a population that meets certain sample criteria desired by the researcher [38]. This study uses a population and a

sample of the total Islamic commercial banks listed on the Indonesia Stock Exchange: PT Bank Aladin Syariah Tbk, PT Bank Syariah Indonesia Tbk, PT Bank BTPN Syariah Tbk, and PT Bank Panin Dubai Syariah Tbk.

The data collection technique in this research is a data archive. One form of data collection is secondary data. The data analyzed is the prospectus of companies conducting initial public offerings. In this study, the data. Secondary data is obtained from financial statements, ICMD listed on the Indonesia Stock Exchange, or other data published by the Company.



**Figure 1. Research Framework** 

Keterangan gambar: IC : IntellectualCapital ICD: IntellectualCapitalDisclosure NP : The Value of Company (*Nilai Perusahaan*) KP : Company Performance (*Kinerja Perusahaan*) **2.1 Variables** 

a. IntelectualCapital

The intellectual capital variable referred to in this study is the performance of intellectual capital, namely the creation of value obtained from the management of intellectual capital. Intellectual capital performance is measured based on the added value created by physical capital (VACE), human capital (VAHC), and structural capital (VASC). Then VAIC symbolizes the combination of the three added values. The measurement of intellectual capital performance is based on the model developed by Public (1998, 1999, 2000, 2003).

The selection of the VAIC<sup>TM</sup> model as a measure of intellectual capital refers to the research [36] [9] [35] [34] b. Intellectual Capital Disclosure

Intellectual capital disclosure is proxied by the intellectual capital disclosure index. The disclosure index used in this study is the intellectual capital disclosure index used by Singh and Zahn [32]. The use of this index is based on the consideration of the similarity of the object of research, namely companies conducting IPOs. The disclosure items in this index are more comprehensive when compared to the disclosure index used by Bukh et al [6] and Abdolmohammadi [1]. This index consists of 81 items classified into the following six categories. Resources (28), Customers (14), Information Technology (6), Processes (9), Research and Development (9), and Strategic Statements (15).

This study uses content analysis techniques with the simplest form to measure companies' disclosure of intellectual capital. The scoring for the disclosure items is done using an unweighted dichotomous scale. Suppose the object for each category of intellectual capital disclosure is disclosed in the prospectus. In that case, it will be given a value of one (1) and zero (0) if the item is not disclosed. Each item is summed to obtain a total disclosure score for each Company. The ratio of each Company's intellectual capital disclosure level is obtained by dividing the total disclosure score in each Company by the total items in the intellectual capital disclosure index. c. The Value of Company (*Nilai Perusahaan*)

The dependent variable in this study is a Company value, measured using Earnings per share (EPS). EPS provides a measure of profitability that includes operating, investment, and financing decisions [16]. The EPS value is obtained by using the formula:

EPS = TotalEarnings Outstanding Share

d. Company Performance

The Company's performance measurement uses three proxies: Return on Equity (ROE) and Return on Assets (ROA).

#### 2.2. Data Analysis

Descriptive statistics are used to analyze data by describing the data that has been collected as it is without intending to make general conclusions or generalizations. Descriptive statistics are used if the researcher only wants to express the sample data and does not want to make conclusions about the population from which the sample is taken. Multiple linear regression analysis determines the influence or linear relationship between two or more independent variables with one dependent variable.

The hypothesis testing of this research was conducted using the Structural Equation Model (SEM) approach using Partial Least Square (PLS) software. PLS is a component-based or variance-based structural equation model (SEM). Ghozali [10] states that the PLS approach does not assume that data must be measured on a specific scale. The number of samples is small and not. PLS considers that data must have a certain distribution, which can be nominal, ordinal, interval, and ratio. PLS can be used to company the theory because the theoretical basis in this study is not very strong. PLS can also be used to explain whether there is a relationship between latent variables.

### 3 RESULT

The convergent validity of the measurement model with reflexive indicators is assessed based on the correlation between item values and construct values calculated using PLS. Individual indicators are considered reliable if they have a correlation value > 0.70. However, at the development stage of the outer loading scale, the value of 0.50 to 0.60 is still acceptable [10]. The EPS indicator is removed from the model because it has a loading of less than 0.50, which is 0.196. Furthermore, the model is re-estimated again by eliminating the EPS indicator. The results of the data validity test in this study can be seen in Table 2, showing the root values of AVE IC:1, ICD:1, KP:0.90, and NP:1 > 0.50. These results show that the data in this study meet the validity requirements.

The results of the data reliability test in this study can be seen in Table 2, showing the Composite Reliability IC value: 1.0000000, ICD: 1.0000000, KP: 0.886971, NP:1.000000 > 0.70. With these results, it can be concluded that the data in this study meet the reliability requirements.

Testing hypothesis 1 shows that the t-statistics between IC and Company value is more than 1.96, which is 2.031107. This means significant at 0.05. In this model, IC closely relates to substantial value because R is 0.064323 (see Table 3). Thus, hypothesis 1 is accepted. Testing hypothesis 2 shows that the t statistics between ICD and Company value is greater than 1.96, which is 2.011926. This means significant at 0.05. ICD is closely related to the substantial value in this model because R is 0.064323 (see Table 3). Thus hypothesis 2 is accepted.

	Ν	Mean	STD	Minimum	Maximum
			Deviation		
NP	34	24,376	3,6548	13,56	26,82
ROE	34	10,412	24,4226	-123,35	122,25
ROA	34	5,077	12,05141	-34,89	47,88
IC	34	7,343	18,46673	-89,76	86,67
ICD	34	,1641	,07168	,08	,38

Table 1. Descriptive Statisti
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Source: processed data, PLS

Table 2. Summary	of Hypothesis	<b>Testing Results</b>

Code	Hypothesis	Result
H <sub>1</sub>	IC has a positive effect on The Value of the Company	Accepted
$H_2$	ICD has a positive effect on The Value of the Company	Accepted
H <sub>3</sub>	IC has a positive effect on The Value of the Company	Accepted

#### Source: processed data, PLS

Testing hypothesis 3 shows that the t statistics between IC and company performance is greater than 1.96, which is 2.531242. This means significant at 0.05. In this model, IC is closely related to company performance because R is 0.056879 seen in Table 3. So, hypothesis 3 is accepted. Testing hypothesis 4 found that the value of t-statistics between ICD and company performance is smaller than 1.96, which is 0.281928. This means that it is not significant at 0.05. In this model, ICD does not have a very close relationship with company performance because R is 0.056879 seen in Table 3. So, hypothesis 4 is rejected. Overall, the results of hypothesis testing using PLS can be seen in Table 4.

	AVE	Akar AVE	Composite Reliability	R Square	Cronbach Alpha	Communality	Redundancy
IC	1,000000	1	1,000000		1,000000	1,000000	
ICD	1,000000	1	1,000000		1,000000	1,000000	
KP	0,765214	0,90	0,859362	0,056879	0,746560	0,796723	0,045092
NP	1,000000	1	1,000000	0,064323	1,000000	1,000000	0,035816

 Table 3. Data Quality Test

Source: processed data, PLS

**Table 4. Hypothesis Test Results** 

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error	T Statistics (IO/STERRI)
IC->KP	0,213453	0,236785	0,093031	0,093031	2,531242
IC->NP	0,166178	0,189276	0,086686	0,086686	2,031107
ICD->KP	0,021276	0,016091	0,079892	0,079892	0,281928
ICD->NP	0,152891	0,160152	0,084492	0,084492	2,011926

Source: processed data, PLS

#### 4 CONCLUSION

This study examines and obtains empirical evidence about the positive effect of intellectual capital and disclosure on company value and performance. Based on the results of the analysis that has been done, it was found that intellectual capital has a significant positive effect on Company value. The higher the intellectual capital the Company owns turns out to impact the Company's value. In this case, investors will give a higher value to companies with higher intellectual resources than companies with low intellectual resources because intellectual capital capital consists of three interconnected components that synergize to form intellectual capital that will improve company performance. The value given by investors to the Company will be reflected in the Company's stock price.

Intellectual capital disclosure has a significant positive effect on Company value. Companies that disclose more components of intellectual capital in their annual reports tend to have higher market capitalization values. Higher intellectual capital disclosure will provide credible or trustworthy information, reducing investor errors in evaluating the Company's stock price and increasing market capitalization.

Intellectual capital has a significant positive effect on company performance. IC is be lieved to be essential in increasing company value and financial performance because intellectual capital consists of three critical components: human capital, structural capital, and customer capital. Each interconnected and synergistically

forms intellectual capital that will improve company performance. Intellectual capital disclosure does not have a positive effect on company performance. In this case, the disclosure of intellectual capital does not directly affect the Company's performance because disclosure is more likely to affect the value of the Company. The influence of intellectual capital disclosure has an insignificant effect on specific items in the Company's performance.

This study has several limitations, including; This study only examines a few variables, so the scope of the research is not too broad. Furthermore, the sampling method in this study used a purposive sampling method which has a weakness in low generalization compared to the random process. In addition, this study only examines the extent of intellectual capital disclosure in one year. A more in-depth analysis is needed on the development of the time of intellectual capital disclosure from year to year. The suggestion for further research is that it is necessary to expand the research sample year so that the population studied is wider. In addition, further research needs to expand the scope of research by adding related variables and increasing the object of research by examining all bona fide companies, not only Islamic banks listed on the IDX.

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