

Original Research Article

The Role of Intellectual Capital in Islamic Banking Performance in Indonesia

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Abstract: This study evaluates how intellectual capital influences Islamic banking performance in Indonesia. The IB-VAICTM method for measuring intellectual capital has three components: human capital, employed capital, and structural capital. Simultaneously, the profitability ratio or ROA is utilized in Indonesia to evaluate the performance of Islamic banking. The strategy for collecting samples utilizes the method of purposive sampling. The secondary data comprises the annual reports of eleven Indonesian Islamic commercial banks registered with the Financial Services Authority (OJK) between 2016 and 2018. Using version 25.00 of the SPSS application for Windows, the data analysis approach is simple regression. Between 2016 and 2018, this study reveals that intellectual capital significantly impacts the performance of Islamic banking in Indonesia. This study reveals that Islamic commercial banks in Indonesia have incorporated the three components of intellectual capital efficiently.

Keywords: Intellectual Capital, Performance.

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INTRODUCTION

Indonesia is a country with the majority of the population embracing Islam. As a country with a majority of Muslims, it will undoubtedly positively impact improving industrial performance in the sharia sector, one of which is Islamic banking. Islamic banking development in Indonesia is experiencing a relatively rapid increase. This is evidenced by statistical calculations, which state that the number of Sharia Banking in Indonesia in 2019 was recorded as having 12 Islamic Commercial Banks, 22 Shariah Business Units, and 164 Shariah Rural Banks (www.ojk.go.id). This development has implications for the economy and business in this digital and modern era requiring companies to follow technological developments to improve their performance and compete with their competitors.

The development of Islamic banking in Indonesia is expected to impact the performance of Islamic banking itself positively. The performance of Islamic banking in Indonesia during the nine months this year tends to weaken due to the instability of the global and domestic economy. Based on data on financial performance for nine months at 10 Islamic Commercial Banks and Sharia Business Units, five continue to show a slowdown in profit growth. Meanwhile, four other Islamic banks continued to

decline in profit from a quarter I / 2019 to quarter III / 2019. Only one bank has consistently recorded an increase in profit growth in 2019 (m.bisnis.com). Apart from the above, Islamic banking performance in Indonesia is still slow due to the less-than-optimal management of Islamic banking in Indonesia. Sharia banking in Indonesia is still experiencing problems with the number and quality of Human Resources (HR), which are inadequate in terms of information technology and do not support the development of products and services. Besides, the quality of human resources and information technology for Islamic Banking is generally still below that of Conventional Banking (m.detik.com). Besides the above, it is due to the lack of adequate preparation of Human Resources (HR), especially regarding human capital, who has an in-depth background knowledge of both Islamic Sharia and Islamic Banking. The facts that occur in the field show that most of the human resources working in the Islamic Banking industry do not have academic experience in the field of Islamic Banking. Another problem in the spotlight is Sharia Banking practitioners' mindset, who are too profit-oriented and forget the primary goal that Islamic banking is part of the year and da'wah of Islam. There is a thought in the community that capitalists only use the sharia label to make more profits from predominantly Muslim people (www.kompasiana.com).

Based on some of the problems above, in implementing its performance, Sharia Banking in Indonesia does not always orient towards profit or profit-sharing and must pay attention to the company's environmental conditions. In this case, Islamic Banking must support improved performance from various aspects, one of which is by increasing the quality and quantity of Human Resources (HR) and from other fields in the corporate environment that can support better performance. Human Resources are the most valuable asset in a company, primarily Intellectual Capital because humans control all companies' tangible operational assets. Physical and financial capabilities and service and production facilities are currently not essential factors supporting company competence. The main factor that becomes the main focus in realizing a company's competitive advantage comes from intangible assets: knowledge.

LITERATURE REVIEW

According to Supriyadi, this study recommends a value-added intellectual creation method in Indonesia to improve Islamic banking performance (2020). Islamic banking in Indonesia has been able to analyze the environment in order to comprehend the challenges and opportunities contained in environmental change, particularly technological development, exploiting challenges and opportunities that are crucial to be developed in order to make the capabilities and capabilities of Islamic banking in the face of global competition, especially in the banking sector. According to Tahir *et al.*, (2016), the higher the VAIC score, the better the bank returns. HCE has the most significant impact on the financial performance of banks when VAIC is broken down into its three components (CEE, HCE, and SCE).

Intellectual Capital

(Brooking, 1996) (Ulum, 2017: 79) asserts that Intellectual Capital (IC) refers to the intangible assets, intellectual property, people, and infrastructure that enable a corporation to function. In addition, according to (Suroso, 2018, p. 2), intellectual capital is the sum of an organization's knowledge that can generate value and provide a competitive advantage. Academics have identified three primary IC constructs, according to (Bontis *et al.*, 2000) (Ulum, 2017, p. 80): Human Capital (HC), Structural Capital (SC), and Customer Capital (CC) (CC). HC reflects the individual knowledge stock offered by the employees of a business. HC integrates genetic inheritance, education, commercial experience, and life philosophy. SC comprises the organization's non-human knowledge stores. This comprises databases, organizational charts, process manuals, strategies, routines, and everything else that contributes to the company's intangible worth. In contrast, the primary concept of CC is the business-related information a company acquires regarding its marketing channels and client relationships. The approach is used to analyze the performance of

Intellectual Capital in Islamic banking per (Ulum, 2017, p. 131). (IB-VAIC read Islamic Banking VAIC).

Ulum designed IB VAIC based on the financial statements of Indonesian Islamic banks; the following stages are incorporated. First, the IB-Value Added is determined when computing Value Added (VA) (IB-VA). IB-VA is determined using this method. Namely, $IB-VA = OUT - IN$. Total income/net revenue of sharia activities (primary operating income of sharia activities plus other operational income less third-party profit-sharing rights and temporary syrah). IN (Input) is the sum of all operating and non-operating expenses, excluding employee-related costs. In the second step, the Value Added Capital Employed is computed (IB-VACA). IB-VACA is an indicator of in-VA that a Human capital member established. This ratio represents the contribution of each unit of CE to the company's value-added. $IB-VACA = VA / CE$, where VA represents value-added and CE represents capital employed, i.e., available cash made up of equity and net income. IB-VAHU indicates the amount of IB-VA that can be created with the funds invested in labour. This ratio shows how much each rupiah invested in HC contributed to the company's value added. $IB-VAHU = VA / HC$, where VA is value-added, and HC is human capital produced from employee expenditures. 4. Calculating Structural Capital Value Added (IB-STVA). This ratio calculates the amount of SC required to produce one rupiah from the IB-VA and indicates the SC's ability to create value. SC is structural capital obtained from $IB-VA - HC$, and VA is value added. Compute the Intellectual Value Added Coefficient (IB-VAICTM). $IB-VAICTM = IB-VACA + IB-VAHU + IB-STVA$; $IB-VAICTM = IB-VACA + IB-VAHU + IB-STVA$.

Sharia Bank Performance and Its Measurement

Sharia Banks consist of Sharia Commercial Banks and Sharia People's Financing Banks, both of which do business according to sharia principles (Yaya *et al.*, 2016, p. 48). In 1992, despite the institution's rapid growth, Sharia banks were established in Indonesia. According to (Suroso, 2018, p. 15), sharia banking performance is the achievement of the objectives of a particular activity or piece of labour to achieve the aims of Sharia Banking organizations, as determined by the prevalent measurement ratio. One of the ratios used to measure the performance of Islamic banks utilizing the profitability ratio. The objective of profitability ratio analysis is to determine a company's business efficiency and profitability level. The profitability ratio is a metric that evaluates the level of an asset's capacity to generate profit.

Profitability might be considered one of the most suitable performance measures. ROA was the profitability ratio employed in this investigation. ROA is the appropriate metric for calculating the performance of sharia banks since it is an indicator

unaffected by the high equity multiplier and is the correct measuring instrument for determining the ability of sharia banks to earn profits from their asset portfolios. According to (Hanafi & Halim, 2016, p. 84), the ROA formula is Net Income/Total Assets. ROA can reflect the return on all assets (funding) the company obtains. ROA demonstrates how effectively Sharia-compliant banks maximize their assets to create profits. The higher a bank's profit level and the more beneficial its asset utilization position, the greater its ROA. Since the amount of ROA is affected by the profit generated by Sharia banking, the effectiveness of Sharia banking grows as ROA rises.

The Influence of Intellectual Capital on Sharia Banking performance

According to (Suroso, 2018, p. 2), intellectual capital is the sum of all individuals' knowledge in an organization that can generate for the organization and provides the organization with a competitive advantage. Intellectual Capital is an intangible asset comprising three components, namely human capital, structural capital, and customer capital, that improves a Sharia Banking company's capacity to compete and perform. If utilized properly and efficiently, intellectual capital will have a favourable effect on sharia banking performance. Human Resources Capability (HR) that develops well in a Sharia Banking company will support performance and bring good competitive advantages.

According to (Suroso, 2018, p. 7), Intellectual Capital in Islamic Banking companies, if used effectively, will develop into a basis for financial and competitive benefits. Businesses with higher Intellectual Capital will be better equipped to respond to changes and unexpected market demands. Thus, if Intellectual Capital in Sharia Banking runs effectively, it will undoubtedly bring a significant change in the performance of Sharia Banking.

The assertion is also backed by (Nizar & Anwar, 2015), who argue that the greater the efficiency with which a company manages its assets, in this case, its intellectual capital (human capital, structural capital, and customer capital), the greater the company's financial success will be. Intellectual capital can play a significant role in developing added value and enhancing the firm's financial performance; therefore, the organization must effectively manage its intellectual capital. Based on the above explanation, hypotheses might be drawn. Intellectual Capital has an impact on the performance of Sharia Banking in Indonesia.

RESEARCH METHODS

Data and Samples

The type of data used in this study is secondary data. Data were obtained from the Annual Report of Sharia Commercial Banks (BUS) registered with the Financial Services Authority (OJK). While in this study, the population is 12 Sharia Commercial Banks. Of these populations following the criteria, namely Sharia Commercial Banks that published the 2016-2018 annual report and have complete data according to the variables in this study are 11 Sharia Commercial Banks. Researchers used purposive sampling techniques to determine the sample size and obtained 33 samples of 11 Sharia Commercial Banks for three consecutive years, namely 2016, 2017 and 2018.

Variable Operational Definitions

Dependent variables in this research are the performance of Sharia Banking, which will be described as follows: Sharia Banking performance is an achievement of a particular activity's objectives or works to achieve the goals of a Sharia banking company as measured based on the prevailing measurement ratio. In this study, sharia banking performance's dependent variables were measured by profitability ratio, namely return on Asset (ROA). ROA focuses on the company's capabilities by utilizing its assets. ROA is essential for Sharia banks because ROA is used to measure Sharia banks' effectiveness in generating profits by using their assets. In addition to the above, the regulator believes that ROA is the right measuring instrument to calculate Sharia banks' performance and efficiency. ROA is not distorted by the high equity multiplier and shows the right measuring instrument to know Sharia banks' ability to generate profit from asset portfolios. According to (Hanafi & Halim, 2016, p. 84), to measure how much the formula can calculate ROA produced by Sharia Banking in each period:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

While Intellectual Capital is the independent variable in this study, it will be described as follows: Intellectual Capital is the key driver of value generation, organizational success, and competitive advantage. Knowledge resources consist of personnel, customers, processes, and technologies that businesses can leverage to generate value. According to (Ulum, 2017, p. 132), the following formula is used to measure intellectual capital variables: IB-VAICTM is the combination of the three primary components, IB-VACA, IB-VAHU, and IB-STVA. IB-VAICTM compositions are IB-VACA + IB-VAHU + IB-STVA.

RESULT AND DISCUSSION

Descriptive Analysis

Table 1
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	33	-.12	.02	-.0098	.03567
IC	33	-3.963800E0	3.498219	1.16011288E0	1.852461493
Valid N (listwise)	33				

Source: output SPSS 25

Descriptive test results where the total sample used in this study obtained n as many as 33 research data that will describe as follows: ROA variable has a minimum value of -0.12 owned by Maybank Syariah and a maximum value of 0.02 owned by Bank Mega Syariah with a mean value of -0.0098 and a standard deviation value of 0.03567, Intellectual Capital Variable (IC) has a minimum value of -3.963800 owned by Maybank Syariah with a maximum value of 3.498219 owned by Bank Negara Indonesia Syariah with a mean value of 1.16011288 and standard deviation value of 1.852461493.

Capital Employed Value of Sharia Commercial Banks

Capital employed is all physical assets in Sharia Commercial Banks, covering all equity owned by Sharia Commercial Banks. If one unit of capital employed can produce a greater return on a Sharia Commercial Bank, then the Sharia Commercial Bank can utilize capital employed optimally. In this study, there were 11 Sharia Commercial Banks from 2016 to 2018. Based on statistical tests conducted from 11 samples of Sharia Commercial Banks showed, the highest capital employed value at Bank Panin Syariah in 2017 of 1.19575056. This indicates that the performance of Bank Panin Syariah in 2017 in terms of capital-employed utilization is optimal. Capital employed as a tangible asset in a Sharia Commercial Bank. The more effective the use of tangible assets, the greater the added value generated and will increase

employee productivity that will impact the performance of Sharia Commercial Banks. In contrast, the lowest capital employed value was found in Bank Jabar Banten.

Syariah in 2016 with a value of -0.836121. This indicates that Bank Jabar Banten Syariah in 2016 has not been maximal in utilizing its capital employed, which suggests that Bank Jabar Banten Syariah establishes relationships with customers and other operational parties not well, so it will also result in a decrease in performance. Of the 11 Sharia Commercial Banks that have the ugliest capital employed value are owned by Bank Jabar Banten Syariah and Maybank Syariah. Both banks have capital-employed values on average, with negative constants. This showed that the bank's ability to utilize its capital employed is still significantly less optimal. Relationships with outside companies, such as customers, suppliers, and others, are still impoverished. The bank's performance will worsen. In addition to BJBS and MBS, nine other Sharia Commercial Banks, namely BCAS, BNIS, BRIS, BSB, BSM, MEGAS, BMI, PANIN, and BVIS relatively good and consistent capital employed value during the period 2016-2018. This will positively impact the performance of Sharia Commercial Banks in terms of better and optimally establishing relationships with external parties, such as customers and suppliers. The description above is more clearly presented in the form of the diagram below:

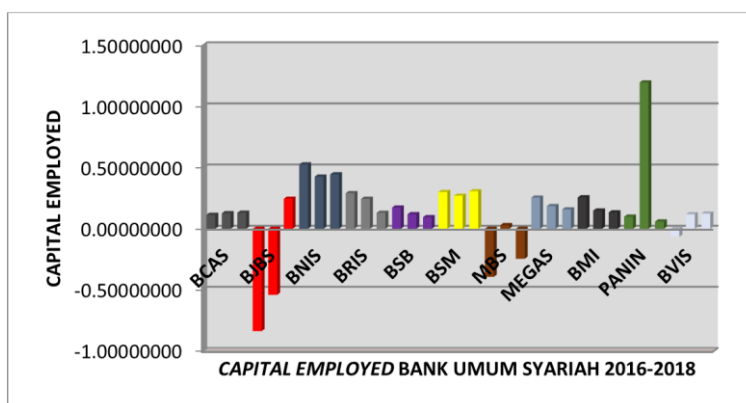


Figure 1: Capital Employed Value of Sharia Commercial Banks 2016-2018

Source: data processed in 2020

Human Capital Value of Sharia Commercial Banks

Human capital measures the monetary worth of human resource capabilities. Education, experience, and the capacity to manage human resources may be evaluated economically; therefore, the higher the value of human capital indicates the quality of human resources assets. Human capital is also a human or staffing burden consisting of salary, wage, and employee benefits costs. If a unit of human capital can generate more excellent money for Sharia Commercial Banks, then Sharia Commercial Banks can utilize human capital more effectively.

In this study, based on the sample studied, Sharia Commercial Bank from 2016 to 2018 has the highest human capital value, namely Bank Negara Indonesia Syariah in 2017, with a value of 2.4761294. This indicates that the human capital in BNIS has been done optimally. Human capital is one of the operational drivers in Sharia Commercial Banks. The increasing

number of employees' innovations will cause the added value obtained by Sharia Commercial Banks to be more excellent and affect their performance. In contrast, the lowest human capital value was found in Bank Panin Syariah in 2017, with a value of -6.31719. In 2017 Bank Panin Syariah experienced a decrease in its human capital performance. This is evident from the value of human capital from 2016 experienced a drastic decline in 2017. In 2017, Bank Panin Syariah is still not optimal in applying human capital, especially in the number of human resources and lack of special attention to its employees. From 11 samples of Sharia Commercial Banks from 2016 to 2018 experienced a drastic decrease in human capital, namely Bank Jabar Banten Syariah, Maybank Syariah, and Bank Panin Syariah. In addition to the three banks above, human capital utilization has been said to be quite helpful and consistent in applying the skin of human resources assets. The description above is more clearly presented in the form of the diagram below:

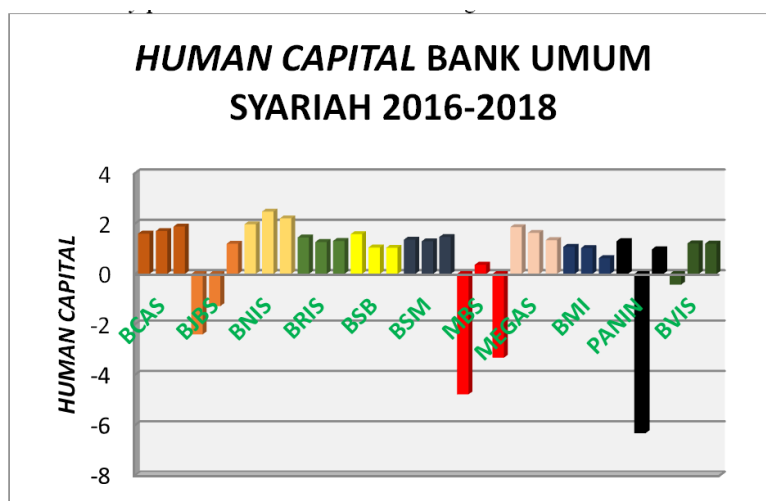


Figure 2: Human Capital Value of Sharia Commercial Banks 2016-2018
Source: data processed in 2020

Structural Capital Value of Sharia Commercial Banks

Structural capital is all the amount of the company's profit outside human capital factors of employee expenses; Structural capital includes infrastructure, management processes, technology, goods, company databases, trademarks, and so on that can be measured by economic value. This means that the higher structural capital value indicates that Sharia Commercial Banks have adequate infrastructure to increase Sharia Commercial Banks overall monetary value.

In this study, after testing from a sample of Sharia Commercial Banks, the highest structural capital value in Bank Victoria Syariah in 2016 amounted to 3.37064. This indicates that Bank Victoria Syariah, in 2016, has implemented its structural capital well and optimally. It can be said that Bank Victoria Syariah has been managing technology well and keeping up with

digital developments periodically to affect performance for the better. In contrast, the lowest structural capital value was found in Maybank Syariah in 2017, with a value of -1.74477. This is because, in that year, Maybank Syariah did not apply the structural capital component properly. This is due to the company's lack of ability to discover innovations in the management of the technology used to impede its performance. Structural capital value in 11 Sharia Commercial Banks in Indonesia, which is relatively consistently low for three years (2016-2018), namely at Bank Muamalat Indonesia.

Meanwhile, the average of Sharia Commercial Banks sampled in this study, except those described above, has a relatively good structural capital value. This means structural capital has been implemented optimally and adequately to support better performance. The description above is more clearly presented in the form of the diagram below:

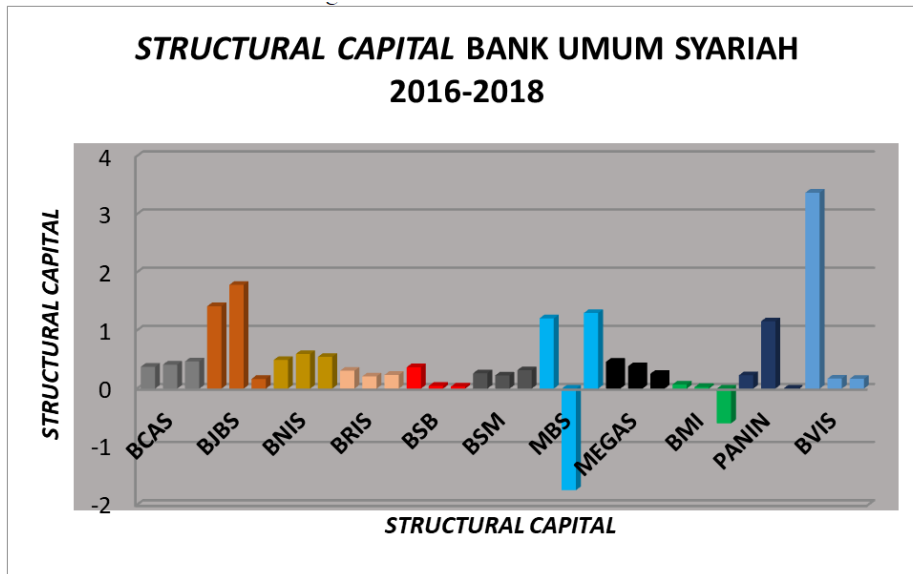


Figure 3: Structural Capital Value of Sharia Commercial Banks 2016-2018
 Source: data processed in 2020

Simple Regression Analysis

Simple regression analysis is a method of knowing the relationship between one dependent variable to one independent variable. In this study, the data has fulfilled the traditional assumption. Then a

simple regression test is carried out, which includes a coefficient test of determination and a partial significance test (t-test). Both tests will be presented in the following table:

Table 2
 Coefficient of Determination
 Model Summary

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	.904 ^a	.818	.812	.01547

a. Predictors: (Constant), IC
 b. Dependent Variable: ROA

Source: Output Spss 25

Table 2 above obtained an Adjusted R Square value of 0.812 or 81.2%. This indicates that intellectual capital variables on the performance of Sharia Banks

(Sharia Commercial Banks) in Indonesia amounted to 81.2%, while other variables outside this research influenced the remaining 18.8%.

Table 3 t-Test Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.030	.003		-9.395	.000
	IC	.017	.001	.904	11.794	.000

a. Dependent Variable: ROA

Source: Output Spss 25

In 2016-2018, Intellectual Capital determinants affected the performance of sharia banking in Indonesia, as shown in Table 3. As shown, intellectual capital has a t value of 11,794 and a significance of 0.000. The significant level of 0.000 0.05 indicates that intellectual capital influences the ROA performance of Sharia Banking. Intellectual

capital is a company's knowledge resource in the form of personnel, customers, processes, or technologies that may be used to create value. The greater the company's intellectual capital value, the better it performs in Sharia Banking. Effective management of an organization's intellectual capital can generate value. The performance of Sharia Banking will improve if the three components

of intellectual capital are executed optimally and adequately. This is confirmed by studies (Nizar & Anwar, 2015) indicating that intellectual capital can give Islamic banks a competitive advantage, allowing them to compete and adapt to changes in the business environment. Thus, Islamic banks' financial performance can be enhanced and maintained.

CONCLUSIONS AND RECOMMENDATIONS

Intellectual capital affects the performance of Sharia Banking in Indonesia. In this research, the three components of intellectual capital by each Sharia Commercial Bank in Indonesia have been optimal. They are well- equipped in terms of human resources or human capital, relationships with outside parties or capital employed, and technology or structural capital management. The three components that are part of intellectual capital have been implemented to the maximum, positively impacting the performance of Sharia Banking in Indonesia.

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