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International Research Journal of Management, IT & Social SciencesAvailable online at <https://sloap.org/journals/index.php/irjmis/>

Vol. 7 No. 5, September 2020, pages: 109-116

ISSN: 2395-7492

<https://doi.org/10.21744/irjmis.v7n5.977>

Intellectual Capital on Financial Performance in Sharia Banks in Indonesia

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Article history:

Submitted: 27 June 2020

Revised: 18 July 2020

Accepted: 9 August 2020

Keywords:

banking;
commercial;
companies;
financial performance;
intellectual capital;

Abstract

This research was conducted to determine the effect of intellectual capital (VACA, VAHU, STVA) on the financial performance of Islamic banks in Indonesia. The population in this study were all 14 Islamic commercial banks in Indonesia. The sample used in this study met the criteria of 12 Islamic commercial banks using a purposive sampling technique. The data collection method uses secondary data in the financial statements for the period 2014-2019. The results of the multiple linear regression analysis show that value-added capital employees (VACA) have a positive and significant effect on the financial performance of Islamic banks in Indonesia for the period 2014-2019. Value-added human capital (VAHU) has a negative and significant effect on financial performance in Islamic banks in Indonesia, Indonesia for the period 2014-2019. Structural capital value-added (STVA) has a positive and significant effect on financial performance at Islamic banks in Indonesia for the period 2014-2019. Intellectual capital in banking companies can be used as a tool to increase company value so that it can continue to compete and can develop IC as a tool to increase company value so that it can continue to compete and become better.

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1 Introduction

The bank is one of the financial institutions or companies engaged in finance. Banks according to Act Number 7 of 1992 concerning Banking as amended by Act No. 10 of 1998, states that a bank is a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and or other forms to improve the standard of living of the people at large (www.ojk.go.id, 2013).

Company profitability has become the main criterion in determining the company's financial performance. Measuring company performance can be seen from the company's financial statements using analysis tools, namely financial ratios. Return on assets (ROA) is a ratio that describes a bank's ability to manage funds invested in all assets that generate profits. ROA is a description of bank productivity in managing funds to generate profits (Muhamad, 2014).

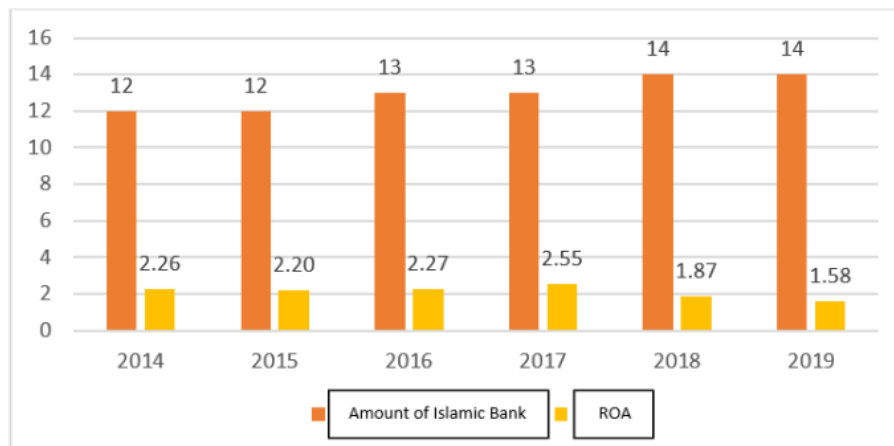


Figure 1. Growth of Sharia Commercial Banks and Return on Assets of Sharia Commercial Banks in Indonesia in 2014-2019

Data Source: Financial Services Authority, processed 2020

Figure 1 shows the growth of Islamic banking in Indonesia. Based on the data, it can be seen that there is an increase every two years the number of Islamic banks in Indonesia. In 2014 - 2015 the number of Islamic banks in Indonesia showed as many as 12 banks. 2016 - 2017 saw an increase in the number of Islamic banks to 13 banks. In 2018-2019, the number of Islamic banks in Indonesia increased to 14 banks. This shows good development for the growth of Islamic banks in Indonesia. Also, the profitability value on the return on asset (ROA) indicator for Islamic banks in Indonesia which is registered with the Financial Services Authority for the period 2014 - 2019. In 2014, the ROA value showed a value of 2.26. 2015 shows that the ROA value has decreased from the previous year of 2.20. The year 2016 shows an increase in the ROA value of 2.27. 2017 showed an increase in the value of ROA of 2.55 when compared to the previous year. Whereas in 2018 it showed a decrease of 1.87 and in 2019 it decreased by 1.58. Between 2014 - 2019 the highest ROA value occurred in 2017 at 2.55 while the lowest ROA value occurred in 2019 which amounted to 1.58.

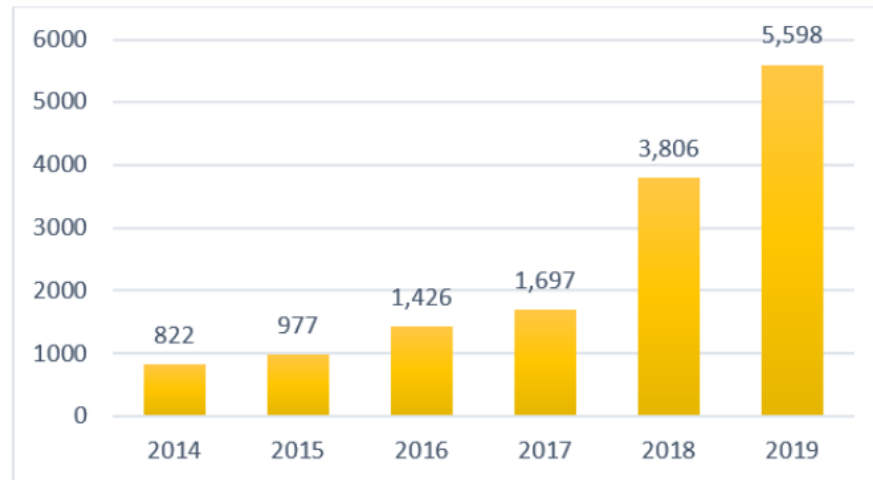


Figure 2. Growth of Sharia Commercial Bank Profit in Indonesia 2014-2019
(in billions of IDR)

Data Source: Financial Services Authority, processed 2020

Figure 2 shows the profit growth in Islamic commercial banks in Indonesia from 2014-2019. It can be seen that the profit of Islamic banks in Indonesia shows an increase every year. In 2014, Sharia banks' profit showed IDR. 822. In 2015, an increase of IDR. 977. In 2016, an increase of Rp. 1,426. In 2017, there was an increase in IDR. 1,697. The year 2018 has increased by IDR. 3,806 and in 2019 it also increased by IDR. 5,598.

The increase in Islamic banks in Indonesia is also driven by the high public interest in placing their funds in Islamic banks and has developed into a trend. Several factors encourage the growth of the sharia banking industry, namely the conversion carried out by several Regional Development Banks, the implementation of sharia regional regulations. Also, the increasing trend in the halal industry is several things that have become factors for the growth of Islamic banking. The challenges that have been resolved by Islamic banking in increasing the growth of Islamic banks in Indonesia. First, there must be an improvement in the quality of financing, including financing at risk (FaR). Second, strengthening capital, increasing BUKU based on capital to increase the Legal Lending Limit (BMPK). Third, IT improvements to strengthen "transactional banking" and "digital banking" to reduce cost funds to increase current accounts and saving accounts (CASA) while increasing fee-based income (FBI) (www.cnbcindonesia.com, 2015).

The phenomenon of intellectual capital (IC) began to develop in Indonesia after the emergence of PSAK No. 19 (Revised 2000) concerning intangible assets. Although it is not stated explicitly as intellectual capital, it has received more or less attention. According to PSAK No. 19, intangible assets are non-monetary assets that can be identified and have no physical form and are owned for use in producing or delivering goods or services, leased to other parties, or for administrative purposes (IAI, 2007). How is the influence of intellectual capital on financial performance in Islamic banks in Indonesia in 2014-2019?

The purpose of the study (1) To determine and analyze the effect of value-added capital employed (VACA) on return on assets (ROA) at Islamic Banks in Indonesia 2014-2019. (2) To determine and analyze the effect of value-added human capital (VAHU) on return on assets (ROA) in Islamic Banks in Indonesia 2014-2019. (3) To find out and analyze the effect of structural capital value-added (STVA) on return on assets (ROA) in Islamic Banks in Indonesia in 2014-2019. This research is expected to provide additional knowledge in the field of management, especially regarding the study of intellectual capital on profitability in Islamic banking companies in Indonesia. This research is expected to provide information to companies in understanding the use of intellectual capital in achieving the operational efficiency of the company so that it can contribute to increasing company profitability and can be used as a material for decision making tied to the selection of investments in the capital market.

Literature Review

Intellectual capital is a resource in the form of knowledge that is supported by a relationship-building information process that is supported by an information process to establish relationships with outsiders to produce assets of high value and future economic significance for the company (Stewart, 1997; Harvey & Lusch, 1999). According to Baroroh (2013), intellectual capital is an intangible asset that can provide value to companies and the public which includes patents, copyrights, and franchises as well as intellectual property rights.

Value-added capital employed (VACA) is an indicator of value-added (VA) created by one unit of physical capital. This ratio shows the contribution made by each unit of capital employed (CE) to the organization's value-added (VA) (Ulum, 2013). Value-added capital employed (VACA) describes how much added value is generated from the company's capital used.

$$\text{Value Added Capital Employed} = \frac{\text{Value Added}}{\text{Capital Employed}}$$

2 This ratio shows the relationship between value-added (VA) and human capital (HC). Value-added human capital (VAHU) shows how much value-added (VA) can be generated with funds spent on labor. The relationship between value-added (VA) and human capital (HC) indicates the ability of human capital (HC) to create value within the company. The formula for calculating VAHU is as follows:

$$\text{Value Added Human Capital} = \frac{\text{Value Added}}{\text{Human Capital}}$$

Structural capital value-added (STVA) is the amount of structural capital needed to produce each value-added which provides an assessment of the company about how successful structural capital is in value creation (Ulum, 2013).

$$\text{Structural Capital Value Added} = \frac{\text{Structural Capital}}{\text{Value Added}}$$

Return On Asset (ROA) measures the relationship between net income and assets. Results vary between industry types, generally due to balance sheet composition. The utility industry or car manufacturers will generally report lower ROA rates compared to service companies such as law firms or software developers. The manufacturing industry requires expensive equipment as an asset on the balance sheet and therefore cannot be compared to a service-based business. Capital structure can have a significant impact on ROA, therefore analysts can add interest charges to net income. This measure can also be calculated on the tax base, and especially when comparing one company to another.

$$\text{Return On Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$$

2 Materials and Methods

The population in this study were Islamic banks in Indonesia in the 2014-2019 period. The population in this study was 189 banks consisting of 14 Islamic Commercial Banks (BUS), 20 Sharia Business Units (UUS), and 164 Islamic People's Financing Banks (BPRS). Based on the criteria, there are 14 Islamic Commercial Banks (BUS) in Indonesia that is still operating in 2014-2019 and 12 banks that meet the requirements as the research sample. The amount of observational data to be processed in this study is the result of the multiplication between the number of banks and the number of observation periods, namely for 5 periods (2014-2019). So the number of observations in this study for the Islamic Commercial Bank (BUS) group in Indonesia becomes 72 observation data.

3 Results and Discussions

Table 1
Results of Multiple Linear Regression Analysis

Model		Coefficients		Beta	t	Sig.
		Unstandardized Coefficients B	Std. Error			
1	(Constant)	.173	.171		1.008	.317
	VACA	1.592	.349	.474	4.557	.000
	VAHU	-.362	.117	-.651	-3.085	.003
	STVA	1.724	.467	.789	3.695	.000

$$ROA = 0,173 + 1,592VACA - 0,362VAHU + 1,724STVA$$

- 1) The multiple linear regression equation above is known to have a constant of 0.173 with a positive sign. So that the constant magnitude shows that if the independent variables (VACA, VAHU, STVA) are assumed to be constant, then the dependent variable, namely financial performance, will increase by 0.173%.
- 2) The variable coefficient of VACA = 1.592 means that every 1% increase in VACA will cause financial performance to increase by 1.592%.
- 3) The variable coefficient of VAHU = 0.362 means that every 1% increase in VAHU will cause a decrease in the financial performance of 0.362%.
- 4) The variable coefficient of STVA = 1.724 means that every 1% increase in STVA will cause an increase in the financial performance of 1.724%.

Table 2
Test of Significance of Individual Parameters (t-test)

Model		Coefficients		Beta	t	Sig.
		Unstandardized Coefficients B	Std. Error			
1	(Constant)	.173	.171		1.008	.317
	VACA	1.592	.349	.474	4.557	.000
	VAHU	-.362	.117	-.651	-3.085	.003
	STVA	1.724	.467	.789	3.695	.000

- 1) The VACA variable has a beta value of 1.592 with a significant value of 0.000 which is smaller than 0.05. This means that individually the VACA variable has a positive and significant effect on financial performance.
- 2) The VAHU variable has a beta value of -0.362 with a significant value of 0.003 which is smaller than 0.05. This means that individually the VAHU variable has a negative and significant effect on financial performance.
- 3) The STVA variable has a beta value of 1.724 with a significant value of 0.000 which is smaller than 0.05. This means that individually the STVA variable has a positive and significant effect on financial performance.

The Effect of Value Added Capital Employed (VACA) on Financial Performance

Value-added capital employed (VACA) has a positive and significant effect on financial performance. Based on the results of the study, the coefficient value for the variable value-added capital employed (VACA) is 1.592 with a significant value of 0.000 where this value is significant at the 0.05 significance level because it is smaller than 0.05. Thus, value-added capital employed (VACA) has a positive and significant effect on financial performance.

VACA is a capital coefficient, where intellectual capital describes the capital owned by the company in the form of a harmonious relationship with its partners as well as the management of physical capital to help create value-added for the company. Good management and utilization of capital assets can improve financial performance, company

growth, and market value. The efficient use of the capital coefficient (CE) used can increase ROA because the capital used is an asset value that contributes to the company's ability to generate income. The better the company manages VACA, the better the company manages its assets (Pulic, 1998).

Legitimacy theory is very appropriate to explain the physical capital/capital employed with the company's financial performance. Legitimacy theory states that companies continually look for ways to guarantee their operations are within the limits of the norms prevailing in society (Deegan, 2004). The legitimacy theory also states that companies will be motivated to show intellectual capital capacity in the financial statements to obtain legitimacy from the public for their intellectual property. Measuring public legitimacy is important to maintain the company's existence in the corporate social environment. The results of this study are in line with the results of research from (Forte *et al.*, 2019); (Xu & Wang, 2018); (Kamath, 2015); (Isanzu, 2015); (Fadaei *et al.*, 2013) which shows the results that VACA (value-added capital employed) has a positive and significant effect on financial performance.

The Effect of Value Added Human Capital (VAHU) on Financial Performance

Value-added human capital (VAHU) has a negative and significant effect on financial performance. Based on the results of the study, the coefficient value for the value-added human capital (VAHU) variable was -0.362 with a significant value of 0.003 where this value is significant at the 0.05 significance level because it is smaller than 0.05. Thus, that value-added human capital (VAHU) has a negative and significant effect on financial performance.

According to Ulum (2013), value-added human capital (VAHU) shows how much value-added (VA) can be generated with funds spent on labor. The relationship between VA and HC indicates the ability of HC to create value within the company. The stakeholder theory suggests that every employee is required to always provide the best for the company and continue to be encouraged to increase the company's value-added. It is believed that this will increase innovation, either in the form of products or efficiency in costs and will increase the return to the company in the future (Barney, 2001; Abdullah & Sofian, 2012). The results of this study are in line with the results conducted by Madyan (2019); Putri (2019) and Albertini *et al.* (2019) who found the results that value-added human capital (VAHU) had a negative and significant effect on financial performance.

Effect of Structural Capital Value Added (STVA) on Financial Performance

Structural capital value-added (STVA) has a positive and significant effect on financial performance. Based on the results of the study, the coefficient value for the structural capital value-added (STVA) variable is 1.724 with a significant value of 0.000 where this value is significant at the 0.05 significance level because it is smaller than 0.05. Thus, the structural capital value-added (STVA) has a positive and significant effect on financial performance.

Structural capital packages human capital and allows it to be used repeatedly in creating added value. If management can manage structural capital properly, this will help improve company performance so that it can increase return on assets. In companies that need to be done is to store and maintain knowledge so that knowledge becomes company property (Baroroh, 2013). Resources based theory is very appropriate to explain research on intellectual capital, especially in the context of the relationship between structural capital performance variables and company financial performance. This resource-based theory states that a company will achieve excellence if the company has superior resources. Creating and maintaining a competitive advantage, companies can develop their resources to be valuable, not easily imitated, irreplaceable, reliable, and different from other companies (Barney, 2001).

The results of this study are in line with the results of previous studies that have been conducted by (Onumah & Duho, 2019); (Ozkan, Cakan, & Kayacan, 2017); (Smriti & Das, 2017; Chwałowski, 1997); (Ousama & Fatima, 2015); (Kamath, 2015); (Isanzu, 2015); (Zarei, Shamszadeh, & Zarei, 2014); (Fadaei *et al.*, 2013) found that STVA (structural capital value-added) has a positive and significant effect on financial performance.

4 Conclusion

- 1) Value-added capital employed (VACA) has a positive and significant effect on financial performance at Islamic banks in Indonesia for the period 2014-2019.
- 2) Value-added human capital (VAHU) has a negative and significant effect on the financial performance of Islamic Banks in Indonesia in the 2014-2019 period.

- 3) Structural capital value-added (STVA) has a positive and significant effect on the financial performance of Islamic Banks in Indonesia for the period 2014-2019.

Suggestion

Future research might consider using other performance measures that are more appropriate to the conditions and characteristics of companies and investors in Indonesia. Thus, the measurement of company performance is more representative of the actual conditions occurring in Indonesia.

- 1) For banking companies need to develop ICs as a tool to increase company value so that they can continue to compete and become better.
- 2) For regulators, the results of this study illustrate that it does not provide value to the intellectual capital owned by the company. This may be due to the absence of standard measurement and disclosure regarding intellectual capital, resulting in difficulties in making a uniform assessment. Therefore, the regulatory body is expected to be able to set standards for measurement and disclosure of the company's intellectual capital.

Research Limitations

- 1) The companies sampled in this study are only 12 Islamic banks in Indonesia with an observation period of 6 years, from 2014 to 2019.
- 2) Company performance is proxied by using the return on assets (ROA) as a measure of profitability, even though there are many other indicators in measuring company profitability.
- 3) Measurement of intellectual capital only uses VAIC, where this measurement only illustrates the company's intellectual capital value, not the actual value.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

Acknowledgments

We are grateful to two anonymous reviewers for their valuable comments on the earlier version of this paper.

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