

## **Intellectual Capital Analysis in Improving Profitability of Islamic Banking in Indonesia**

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### **Abstrak**

Penelitian ini bertujuan untuk menguji modal intelektual dalam meningkatkan profitabilitas perbankan syariah di Indonesia dari tahun 2015 hingga 2019. Variabel terikat dalam penelitian ini adalah profitabilitas perbankan syariah yang terdiri dari Return on Asset (ROA). Sedangkan variabel bebas dalam penelitian ini adalah Intellectual Capital (VAIC), yang terdiri dari Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), dan Structural Capital Value Added (STVA). Penelitian ini menekankan pentingnya pengungkapan modal intelektual dalam laporan keuangan untuk meningkatkan kinerja keuangan. Data yang digunakan adalah data bank syariah yang terdaftar di Otoritas Jasa Keuangan dari tahun 2015 hingga 2019. Model pengukuran Intellectual Capital menggunakan Model Pulic yaitu VAIC, VACA, STVA, dan VAHU. Data dianalisis secara deskriptif kuantitatif dengan alat analisis regresi linier berganda. Hasil penelitian menunjukkan bahwa VACA dan STVA berpengaruh positif terhadap ROA pada bank syariah di Indonesia, dan VAIC dan VAHU berpengaruh negatif signifikan terhadap ROA di Indonesia.

**Kata kunci:** ROA, STVA, VACA, VAHU, VAIC

### **Abstract**

This research aims to test intellectual capital improving the profitability of Islamic banking in Indonesia from 2015 to 2019. The dependent variable in the study was the profitability of Islamic banking, consisting of Return on Asset (ROA). In contrast, the independent variable in the study was Intellectual Capital (VAIC), consisting of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA). This research emphasizes the importance of intellectual capital disclosure in financial statements to improve financial performance. The data used is Islamic bank data registered with the Financial Services Authority from 2015 to 2019. Intellectual Capital's measurement model uses Pulic Models, namely VAIC, VACA, STVA, and VAHU. Data is analyzed descriptively quantitatively with multiple linear regression analysis tools. The results showed that VACA and STVA positively affect ROA in Islamic banks in Indonesia, and VAIC and VAHU have a significant adverse effect on ROA in Indonesia.

**Keywords:** ROA, STVA, VACA, VAHU, VAIC

### **Introduction**

Statement of Financial Accounting Standards No. 19 on intangible assets appears as a catalyst for developing intellectual capital in Indonesia. Non-

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monetary assets can be identified, have no physical form, and are owned to deliver or produce goods or services, leased to others, or for administrative purposes. The above understanding is the essence presented by the International Accounting Standards (IAS) about intangible assets, the same as the understanding proposed in Financial Reporting Standards (FRS) 10 about intangible assets and goodwill. Both IAS 38 and FRS 10 state that intangible assets must be identifiable, have no physical substance, and are non-financial. In contrast, the accounting principles board (APB) 17 on intangible assets does not clearly define intangible assets (Astuti and Sabeni 2005).

Business competition in era 4.0 requires companies always to be ready to face the challenges caused by technological developments (Husnan 2000). This inevitably has to be addressed and possible for the sake of the sustainability of the company long-term. The development of technology seems to be a double-edged sword; One side provides information disclosure that allows the company to increase its value from various sides. On the other hand, this development also facilitates the monitoring process by competitors, consumers, and investors, who will eventually tighten business competition.

Islamic banking is currently classified as still lacking human resources that have good qualifications, quality, and competence in Islamic banking in particular. It is not challenging to study Islamic banking in general. Islamic banking also provides education and training to its employees about Islamic banking. However, there is a forgotten thing: worldview or the basic philosophy about Islamic banks that have not been deep. This philosophy factor is not yet vital, hampering the development of Islamic banks, especially in Indonesia. Globalization of the world economy produces knowledge based on human resources as a significant factor in the competition between companies. Intellectual capital, commonly referred to as intellectual capital, is a component company has in measuring human resources' value. Many companies in many countries globally, such as America, the UK, Australia, and Denmark, have used and disclosed intellectual capital in the financial statements of companies in the country (Bastian 2006). As a newcomer to the banking industry, Islamic banking

must face obstacles in the form of unfilled human resources that are truly competent in Islamic banking.

One of the less competitive factors between Islamic banking and conventional banking is the intellectual capital of Islamic banking. While operational, Islamic banking has complex technical applications and ideal teaching that requires its SDM to have specific and in-depth expertise. As a core competence in the banking industry, intellectual capital will make it complex for new companies to enter the industry or difficult for companies (Basyar 2012).

One of the factors that can inhibit the growth of Islamic banking and lose the competition with conventional banking because employees' knowledge of the sharia economy is still small, while operationally, Islamic banking has a complement both technical application and ideal teaching that requires its Human Resources to have specific and deep expertise. In this case, Intellectual capital as a core competency in the banking industry will make it complex for new companies to enter the industry or difficult for companies (Basyar 2012). As a result, banks already exist to win a competition or survive in the banking business without being accompanied by changes incompetence.

**Table 1**  
**Growth of Assets, Offices, and Labor of Islamic Banks**

<b>Indicator</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Number of Assets	204,961	213,423	254,184	288,027	316,691
Number of Offices	2,163	1,99	1,869	1,825	1,875
Number of Workers	41,393	51,413	51,110	51,068	49,516

Table 1 describes fluctuations in both the growth in the number of workers and the number of offices, while asset growth only amounted to 1,277,286 billion in the space of 5 years. This shows that during the period 2015-2019, the growth of Islamic banks in Indonesia stagnated; in other words, the table above illustrates how difficult it is for a bank to survive in the banking industry. The development of Islamic banks in Indonesia over the past year until November 2020 consists of 14 Sharia Commercial Banks, 20 Sharia business units, and 167 Sharia People's Financing Banks.

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**Table 2**  
**The Number of Islamic Banks**

Indicator	2015	2016	2017	2018	2019
Shariah Commercial Bank	12	13	13	24	24
Sharia Business Unit	22	21	32	20	20
Sharia People's Financing Bank	163	166	167	167	164

The development of Islamic banks as a sub-system of national banking has great potential in improving the intermediation function of community funds or investment potential in Indonesian Muslim communities, to be channeled into productive activities such as MSME financing and other investments so that real sector economic growth is more realized in the economic gap of Indonesian society.

Currently, intellectual capital is one of the fascinating issues to be studied, various research results both in the Indonesian and international context show inconsistent results, especially related to the relevance of Intellectual Capital in influencing the company's performance (Husnan 2000). So that researchers use intellectual capital variables as independent variables and will be proven how it affects the profitability of Islamic commercial banks. Intellectual Capital data is as follows:

**Table 3**  
**Data Intellectual Capital 2015-2019**

Year	Intellectual Capital					ROA
	IB-VA	IB-VAHU	IB-STVA	IB-VACA	HB-VAIC™	
2015	3,468,167,425	4.03	0.76	60.7	65.49	2.13 %
2016	3,191,600,462	3.45	0.71	42.84	47	2.78 %
2017	2,447,427,964	2.78	0.64	24.44	27.86	3.00 %
2018	2,588,246,097	3.23	0.69	10.37	14.29	0.87 %
2019	1,824,477,705	2.16	0.54	44.12	46.82	1.16 %

The table above shows that the highest ROA calculation occurred in 2017 at 3%. The lowest occurred in 2018 at 0.87%, while according to Ministry of Finance Standard No. 100, the average standard and financial performance measured using return on equity were not good. This means showing that ROA is experiencing an increase and decrease every year. Therefore, seeing the

problem of intellectual data from each know is different. Some experience an increase in ROA and also experience a decrease in researchers increasingly tempted to intellectual capital analysis in improving the profitability of Islamic banking in Indonesia(Veithzal 2007).

Competition between Islamic banks is getting tighter; directly or indirectly, this will affect the profitability of Islamic banking(Veithzal 2007). Although the purpose of Islamic banks is not just to seek profit, the ability of Islamic banks to obtain profits becomes an essential indicator of sustainability of Islamic banks. In addition, the ability of Islamic banks to generate profits is also an important indicator to strengthen the ability to compete with Islamic banks in the long term(Yusuf 2017).

As a financial institution, performance assessment is an important thing to be done by the parties involved in Islamic banks. Performance assessment for management is an indicator of the assessment of achievements achieved by the company. In this case, profit can be used to measure the achievements achieved by a company. Banks need to maintain high profitability so that their performance is considered good with maintained high profitability; banks can increase public confidence to store excess funds held in the bank.

The bank's financial performance is a picture of the bank's financial condition in a certain period, covering aspects of the collection of funds and the distribution of funds. The financial performance can be assessed from several indicators, which are used as the basis for assessing the financial statements of the bank concerned. Based on these financial statements, several financial ratios can be calculated that are commonly used to assess bank performance. For example, financial ratios can be used to measure performance, as they are proven to play an essential role in evaluating financial performance and can be used to predict business continuity, both healthy and unhealthy. The bank's performance assessment is done by analyzing financial statements.

We are changing economic conditions globally, making knowledge-based resources a significant factor in the continuity of competition between companies today. In Indonesia, intellectual capital is a component owned by a company in measuring human resources value(Ulum 2011). The company's

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focus in the efforts to increase Human Resources is characterized by the number of training programs, scholarships, and career acceleration programs (fast-track) provided by the company in supporting the development of human resource competencies.

Research that has been done on intellectual capital, one of which is research that has been conducted by Indah Dian Masyithoh, which examines the influence of intellectual capital as a dependent variable on manufacturing companies that have gone public and listed on the Indonesia Stock Exchange for the period 2016-2018 as a sample of his research(Masyithoh 2012). The research uses VAIC Pulic to measure the components of Intellectual Capital. The relationship between Intellectual Capital variables as dependent variables and corporate financial performance as independent variables for this study. The results of research from Indah show that the better the use of intellectuals in a company, the more financial performance will be more and more investors will invest in the company

Some research shows that the failure of companies to report "hidden value," often referred to as property owned by a company but not seen in its annual report, causes a gap between market value and disclosed book value(Fakhruddin and Purwanti 2015). Therefore, the approach used to improve the quality of financial statements is to encourage increased intellectual capital information. So the contribution of this research is to provide an idea of the importance of the utilization of Intellectual Capital to the profitability of Islamic Banking. The research results reference interested parties from Islamic banks to use the Intellectual Capital constituency in decision-making.

### **Literature Review**

Intellectual capital is material that has been compiled, captured, and used to generate higher asset values. While Nick Bontis defines more comprehensively that intellectual capital is a combination of intangible assets that can make the company function appropriately to form the company(Bontis, Keow, and Richardson 2000).

Nick Bontis stated that, in general, the researchers identified three primary constructs of IC, namely Customer Capital (CC), Structural Capital (SC), and Human Capital (HC). The measurement of the value creation efficiency of the company's tangible and intangible assets is done using the VAIC method; in other words, the company's intellectual capital performance can be measured by this method. Based on the VAIC method, three components are forming: VACA, VAHU, and STVA. The measurement of the value creation efficiency of the company's tangible and intangible assets is done using the VAIC method; in other words, the company's intellectual capital performance can be measured by this method. Based on the VAIC method, three components are forming: VACA, VAHU, and STVA (Ulum 2011).

VACA Firer and William explained that Capital Employed or physical capital indicates value-added created on capital cultivated in the company efficiently. VAHU Human Capital or often referred to as the expertise, innovation, and ability of individual company workers to complete their tasks. Human capital reflects the intellectual abilities possessed by every individual in an organization or company, represented by its employees' knowledge and insights. Human Capital is a place of knowledge that is very useful, skills, and competencies in an organization or company. Human Capital reflects a company's collective ability to come up with the best solutions based on the knowledge that people in the company have. STVA Structural Capital is the organization's ability or a company in the form of routine processes company and its structure that support employee efforts to produce optimal intellectual performance. An individual can have a high level of intellect, but if the organization has poor systems and procedures, then Intellectual Capital cannot achieve optimal performance, and the existing potential cannot be utilized to the fullest (Sartono 2001).

Intellectual Capital measurements can be grouped into two categories: measurement by non-monetary and monetary methods. Non-monetary-based IC measurements are as follows (Bontis, Keow, and Richardson 2000):

1. Kaplan and Norton developed the Balanced Scorecard. A Balanced Scorecard is a mission of an organization and strategy into a performance

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measurement system that provides a framework for measuring strategies and management systems. The Balanced Scorecard is used to measure intellectual capital by monitoring the progress of capabilities and growth in the acquisition of intangible assets.

2. Brooking's Technology Broker Method designs the company's intellectual capital model consisting of Market assets, human-centered assets, Intellectual property assets, and Infrastructural assets. Market assets consist of brands, customers, distribution channels, and business collaborations. Intellectual property assets include patents and copyrights. Human-centered assets include education, knowledge, and competence. Asset infrastructure includes management processes, information systems technology, cooperation, and financial systems.
3. The Skandia IC Report Method by Edvinsson and Malone is a collection of methods for measuring assets pioneered by Leif Edvinsson of Skandia.
4. The IC Index, developed by Roos et al., was developed by Goran and Juhan Ross. Ross et al. divide intellectual capital into 3 elements: human capital, organizational capital, and customer capital.
5. Sveiby Intangible asset monitor (IAM) in Van Berg states that the company's value lies in hidden knowledge-based assets. Nonaka Tak Euchi in Van Berg develops knowledge conversion, which is part of Sveiby's intangible asset monitor

The study used the VAI Pulic Model developed by Pulic (Gujarati 2007). This VAIC method provides information from tangible assets (tangible assets) and intangible assets owned by a company to monitor added value with the company's total resources. Here is the calculation to find a VAIC:

$$\text{VA: VA} = \text{Output} - \text{Input}$$

Based on the above explanation, the VAIC model is as follows:

1. Value Added Capital Employed

Where VACA is the ratio of VA to Capital Employed is the available funds (equity and net income).

## 2. Value Added Human Capital

VA and HC demonstrate the ability to create HC value within a company.

This relationship is formulated as  $VAHU = VA / HC$ .

## 3. Structural Capital Value Added

This relationship shows the contribution of capital to the creation of added value. In the Pulic model, this relationship is formulated with  $STVA = SC/VA$  where  $SC = VA - HC$

## 4. The final ratio of calculation of a company's intellectual capability is a combination of summation of each component formulated as follows:

$VAIC = VACA + VAHU + STVA$

Profitability, according to Bigham, is a provision set by management; the company must continue to maintain profitability for the continuity of a company (Munawir 2002). Profitability is the company's ability to profit from total assets, the sales system, and capital itself (Sartono 2001). The profitability ratio is a way and ability of the company to seek net income ("Analisis Laporan Keuangan - Kasmir" t.t.).

The company's financial profitability can be seen in the company's financial statements on the profit-and-loss statement. Based on that, the company will make it a consideration in economic decision-making.

Islamic banking with a revenue-sharing system without usury starts from total assets minus the company's current liabilities. When the capital used by the company is used effectively, it will increase the total amount of assets in the company so that the ratio of Islamic banking profitability and the company will also increase the ROA profitability ratio. Increased net income on the number of assets (intangible assets), often called intangible assets owned by Islamic banking, is measured through the profitability ratio of Islamic banking, especially with the ROA indicator. The higher the value of VACA in Islamic banking, the higher the profitability ratio of Islamic banking ROA. The higher the company's VACA value, the more the company's Intellectual Capital management system works efficiently.

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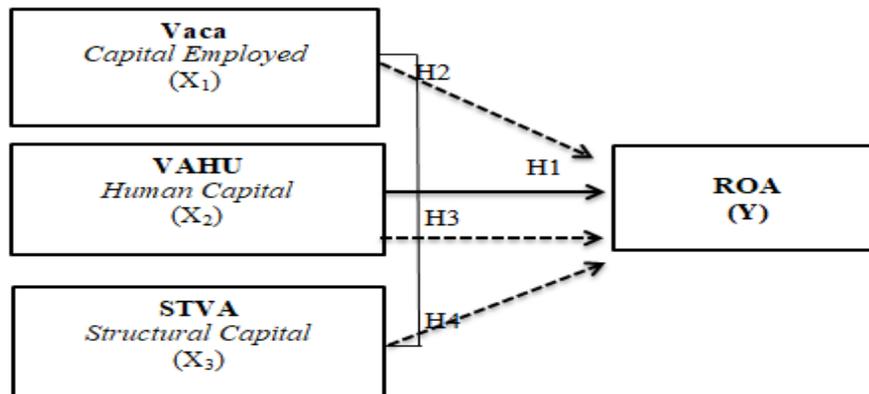
The success of Structural Capital in creating the value of a company is indicated by looking at Structural Capital Value Added (STVA). Structural Capital is needed because it is a link for human capital to increase the value-added of the company. This shows that with structural capital, the management of the company's assets is getting better. When the management of assets is good, it will increase the number of assets owned by the company as measured by Return On Assets (ROA).

Intellectual Capital (VAIC) consists of VACA, VAHU, and STVA. Assuming the higher the value of the three components will be directly proportional to the ROA profitability ratio, in this case, it is the company's higher Return On Assets. Similarly, the lower the value of the three components forming Intellectual Capital, the lower the profitability of Islamic banking ROA.

Today, assessment and testing related to the relevance of intellectual capital to the company's performance still requires further search. This is motivated by the banking system in Indonesia, a dual banking system. Several factors may affect the high level of profitability, such as liquidity, company size, capital structure, etc. However, intellectual capital, derived from intangible aspects, seems to get less attention. When the market is efficient, investors will value companies with more excellent Intellectual Capital. Intellectual Capital (VAIC) consists of VACA, VAHU, and STVA. Assuming the higher the value of the three components, it will be directly proportional to profitability. In this case, the company's return on assets is getting higher. Similarly, the lower the

value of the three components forming Intellectual Capital, the lower the company's profitability.

**Figure 1**  
**Theoretical Framework**



Based on figure 1 above, this study aims to determine which factors are very significant while VACA, VAHU, and STVA affect the profitability of Islamic banking ROA, which can be positive or negative.

### Research Method

This study is categorized as quantitative research based on data using numbers or numbers (Nazir 2011). The study used non-experimental data in the form of secondary data. Data processing is derived from the annual financial statements of conventional and Islamic banks in Indonesia on the Financial Services Authority website from 2015 to 2019. Sampling in this study uses a non-probability approach with the purposive sampling method (Imam 2011). The sample used consists of Islamic Bank in Indonesia as of 2020, registered with OJK, and is not part of Regional Bank. National-scale samples are intended to look at large-scale Intellectual Capital influences rather than regional scales.

The analysis tool in this study is a regression data panel where the panel data is a combination of cross-section and time-series data. Today, assessment and testing related to the relevance of intellectual capital to the company's performance still requires further search. This is motivated by the banking

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If the fixed effect is selected, then it needs to be tested again, namely the Hausmann test, to find out whether it is better to use a Fixed Effect Model (FEM) or Random Effect Model (REM) (Sudarmanto 2005). Hausmann's test was conducted to determine which model should be used, namely FEM or REM. Fem explains that each object has a different interception, but the interception of each object does not change over time. It is called a timeseries, whereas in REM, the interception (together) represents the average value of all interceptions (cross-section), and the component represents the deviation (random) of the individual interception against the average value (Bawono 2006).

The panel's regression analysis of the study was used to analyze the effect of Intellectual Capital on the profitability of Islamic banks. The data panel is a combination of cross-section and time-series data. The equation of the panel data regression model in the study can be formalized as follows:

$$y_{it} = \alpha + \beta_1 X_{it} + \varepsilon_{it}$$
$$i = 1, 2, \dots, N ; t = 1, 2, \dots, T$$

In the equation, N shows the number of observations while T shows the time analyzed. So that the variables in this study are applied in a model as follows:

Model 1:

$$ROA_{it} = \alpha + \beta_1 (VAIC^{TM})_{it} + \varepsilon_{it}$$

Model 2:

$$ROA_{it} = \alpha + \beta_1(HCE)_{it} + \beta_2(SCE) + \beta_3(CEE) + \varepsilon_{it}$$

Information:

ROA : Return on Asset

VAIC<sup>TM</sup> : Value Added Intellectual Coefficient

HCE : Human Capital Efficiency

SCE : Structural Capital Efficiency

CEE : Capital Employee Efficiency

Before testing the regression estimation model, it is necessary to test the model specification to ensure that the model estimated results are not biased or BLUE (Best Linear Unbiased Estimator).

The specification test aims to determine the panel data analysis model used in a study. The test specifications used in this study are as follows:

H<sub>0</sub>: Common Effect

H<sub>a</sub>: Fixed Effect

When the results of this specification test show a chi-square probability greater than 0.05, then the model selected is a common effect. Conversely, if the probability of Chi-square is less than 0.05, then the model that should be used is a fixed effect. When the selected model is a fixed effect, it needs to be tested again, namely the Hausmann test, to find out whether it is best to use a fixed-effect model (FEM) or random effect model (REM)(Sanusi 2011).

The model specification test with the Hausmann Test aims to determine the model used, namely the fixed effect model (FEM) or random effect model (REM). In FEM, each object has a different interception, but the interception of each object does not change over time. It is called a timeseries, whereas in REM, the interception (together) represents the average value of all interceptions (cross-section), and the component represents the deviation (random) of the individual interception against the average value(Sudarmanto 2005). The hypothesis in the Hausmann test is as follows:

H<sub>0</sub>: Random Effect Model

H<sub>a</sub>: Fixed Effect Model

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If hypothesis 0 is rejected, the conclusion should be using FEM because REM is likely to correlate with free variables. Conversely, the REM model should be used if  $H_a$  is rejected.

## Results and Discussion

Panel data regression is a statistical estimation method involving more complex and varied forms of data. A datapanel is a unit of data form that consists of cross-section and time range data (time series). In data testing with this form, there are 3 methods: comment effect, fixed effect, and random effect. The selection of the best model is determined by the assumptions used by the researcher and the fulfillment of statistical data processing requirements. Therefore, in the panel data analysis, the first thing that must be done is to determine the properestimation method by comparing the three models.

**Table 4**  
**Comparison of Estimated Results Using OLS, FE, RE**

Variable	FE	RE	OLS
VAIC	-.03019123**	-.02466899**	-.0104639
_cons	.07052559**	.05865838*	.02813181
N	40	40	40
r2	.25581452		.02859287
r2_a	-.00080117		.00302953

Legend: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Based on the table above, then tire X1 variable in the model has coefficient values that vary in each model with an antagonistic relationship direction. Any increase in ROA of 1 unit will be followed by a decrease in Intellectual Capital (VAIC) in the model. As for the degree of significance, the table above shows that theestimati on model with random effect and fixed effect shortsh as a significant effect with alpha 5%, while model swith the OLS approach did not show significant influence. Furthermore, to find out themost ap propriate model to use, it is necessary to conduct a feasibility test that includes the Chow test, Hausman test, and Multiple Lagrange test.



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Based on the table above, the value (Prob>Chi2) of 0.1068 or more significant than alpha 0.05. Thus, based on its decision-making rules, it can be concluded that the model with a random effect approach is more appropriate to use. Based on a series of tests that have been done, it can be concluded that the best model used in this study is a model using a random effect approach.

Thus the regression equation of panel data with a random effect model is as follows:

**Table 7**  
**Estimated Results Using Random Effect**

ROA	Coef.	Standard Error	Z	P-Value
VAIC	-0.024669	0.0089283	-2.76	0.006
_Cons	0.0586584	0.0239475	2.45	0.014

Based on the STATA13 output listed in the table above, it is known that the VAIC variable shows a negative and significant relationship direction. The interpretation is as follows:

- a. Constanta is the value increase of variable Y (assuming ceteris paribus) produced not based on variables contained in the model. There is an increase with a positive direction of 0.0586584, which is not influenced by variable X in the model.
- b. For VAIC, a one-unit value increase from 0 to 1 will be followed by a decrease in ROA of 0.024669. The strengthening value of Value Added Intellectual Capital (VAIC) in Islamic Banks will cause a decrease in the company's Return on Asset (ROA).

The regression model can be formulated as follows:

$$Y_{it} = \beta_{0i} + \beta_k X_{kit} + \varepsilon_{it}$$

$$ROA_{it} = 0.0586584 + -0.024669 VAIC_{it} + \varepsilon_{it}$$

**Table 8**  
**VACA, STVA, and VAHU Regression Test Results Against ROA**

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Random-effects GLS regression           Number of obs   =           40
Group variable: No                     Number of groups =           10

R-sq:                                  Obs per group:
    within = 0.2295                      min =           4
    between = 0.6134                      avg =           4.0
    overall = 0.4523                      max =           4

                                         Wald chi2(3)    =           21.92
corr(u_i, X) = 0 (assumed)              Prob > chi2     =           0.0001

```

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
VACA	.6295122	.1855514	3.39	0.001	.2658381	.9931862
STVA	.1103532	.0605279	1.82	0.068	-.0082794	.2289857
VAHU	-.0749178	.0231593	-3.23	0.001	-.1203091	-.0295265
_cons	.0681889	.025611	2.66	0.008	.0179922	.1183856

### 1. VAIC to the Level of Profitability of Islamic Banks in Indonesia

The study found that VAIC had a significant adverse effect on ROA in Islamic banks in Indonesia. This is contrary to Resources Based Theory, which states that if the management of intellectual capital is done efficiently, the company will get value-added and can increase the company revenue. However, in this case, the management of intellectual capital at the optimal point lowers the level of Islamic banking income. This may be because Islamic banking focuses on building the company's internal conditions, in this case, intellectual capital, so that banks can build effective and efficient internal conditions for the company. Considering Islamic banking has grown in recent years, there is a need for optimal internal resource development to provide value-added for companies in the future. Managerial ownership is a form of commitment from shareholders to delegate control to a certain level to managers. The low ownership of managers will further limit management's actions in making decisions because there is still another ownership. So it cannot moderate the measurement of value-added intellectual capital to profitability (Dwi 2012).

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## **2. VACA to the Level of Profitability of Islamic Banks in Indonesia**

The study found that VACA affected ROA on Islamic Banks in Indonesia at a 5% degree of significance with a positive relationship direction. This indicates that if the VACA value increases, the ROA value will also increase. Because when the capital used by the company is significant, the company's assets also amount large, then the company's revenue will also increase. In other words, the management of the company's Intellectual Capital is increasingly efficient to get value-added. This is in line with the theory that intellectual capital is a resource that can create a competitive advantage to get value-added for the company. The results of this study are consistent with research conducted by Lutfi Sawarjuwono, which states that Value Added Capital Employed (VACA) has no significant effect on the profitability of companies projected with ROA (Sawarjuwono and Kadir 2003).

## **3. STVA to the Level of Profitability of Islamic Banks in Indonesia**

The results of this study are in line with Artinah's findings that STVA has a significant effect on the profitability of companies projected with ROA (Artinah 2011). At a significance level of 5%, STVA does not affect ROA in Islamic Banks in Indonesia, but at the significance level of 10%, STVA has a significant positive relationship to ROA. The positive relationship between the two indicates that if the company's STVA increases, this will be followed by an increase in the company's ROA. In the current era of digitalization, the role of technology and information will significantly help increase the profitability of companies, especially banking. Therefore, the results of research showing a positive relationship between STVA to ROA are in line with the theory that efficient management of intellectual capital will provide added value to the company and can increase the company's revenue.

## **4. VAHU to the Level of Profitability of Islamic Banks in Indonesia**

In contrast to other intellectual capital criteria, VAHU has a significant negative effect on ROA. This is contrary to the theory

because the higher the value of VAHU, the profitability of Islamic banking decreases. This condition occurs likely due to the high level of knowledge, skills, and competence of Islamic bank employees are still dominated by human resources derived from conventional banking, considering the development of Islamic banking in Indonesia is relatively slow. In addition, because the type of business between Islamic banks and conventional banks differs in several ways, the management of employees' knowledge, skills, and competencies has not been able to provide value-added for the company. Because, in principle, Islamic Bank and Conventional Bank are two different types of business. The results of this study are in line with research conducted by Martha's, which found that VAHU is a negative value and has no significant influence on profitability. Moreover, Islamic banking uses physical capital rather than intangible capital, namely human capital (Kartika 2013).

## **Conclusion**

The conclusions of this study are as follows:

- 1) It is known that VAIC has a significant adverse effect on the ROA of Islamic Banks in Indonesia.
- 2) It is known that VACA has a positive effect on ROA on Islamic Banks in Indonesia.
- 3) STVA has a positive effect on ROA on Islamic Banks in Indonesia.
- 4) VAHU is known to influence ROA on Islamic Banks in Indonesia negatively.

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