Extended Value Added Intellectual Coefficient Plus (E-Vaic Plus) for the Development of Shari'a Banking Intellectual Capital

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ARTICLE INFO	ABSTRACT
	This study examines and analyzes the Intellectual Capital Development of Islamic Banking with E-VAIC Plus. The various and different findings and results from research on the measurement of Intellectual Capital provide an opportunity to test and analyze various factors that influence the measurement of Islamic banking Intellectual Capital. The variables used to test the model in this study are using VAICE-VAIC Plus uses four components, namely HCE, SCE, RCE, and CEE. This research includes causality research. The population in this study were 24 BPRS in East Java Province. The data collection technique uses a documentation study by collecting secondary data, recording, and processing data related to this research. The data used includes: published bank financial reports from 2015 to 2022. Research results found *human capital* does not affect the profitability because in managing human capital must be adjusted to the competence of human resources owned. Structural capital has no effect on profitability. This shows that to create Value Added (VA), a combination of Human Capital (HC) and Structural Capital (SC) is not needed. So that the higher the value of Structural Capital Efficiency has no effect on Return On assets. Capital Employed Efficiency affects profitability. Keywords: Extended Value Added Intellectual Coefficient Plus, Intellectual Capital, Profitability.

INTRODUCTION

The Islamic finance industry has experienced rapid growth in the last decade, especially in Muslim-majority countries. The industry is based on Shariah principles, which emphasize agreements between the two parties in financial transactions, and also emphasize the avoidance of usury (interest), speculation and investment in activities considered haraam by Islamic law.

Islamic banks are one of the main constituents of the Islamic finance industry. Islamic banks operate in compliance with Sharia principles, and offer a variety of financial products and services that comply with Sharia regulations, such as financing, savings, investments, insurance, and credit cards.

Islamic banks also offer financial products and services that are usually offered by conventional banks, such as loans, deposits and interbank transfers(Nomran et al., 2018).

One of the main reasons for the growth of Islamic banks is the religious obligation of Muslims to avoid usury (interest), which is one of the practices prohibited under Islamic law. Islamic banks avoid usury by setting fixed costs and profit margins on their financial products and services, rather than using a variable interest system as used by conventional banks.

In addition, many Muslims are looking for better, Sharia-compliant alternatives in terms of finance and investment, which has driven the demand for Islamic financial products and services. Economic growth in Muslim-majority countries and increasing public awareness of Islamic finance have also been important factors in the growth of the Islamic finance industry.

Although it has shown considerable growth,Islamic Bank (IB) has been criticized for decades. Customer skepticism continues to emerge (Ashraf & Lahsasna, 2017). Expression of dissent in the ecosystem Islamic Bank can be summarized into two points. First, Islamic Bank claimed to be un-Islamic because it is operated conventionally. Second, Islamic Bankdoes not promote Islamic moral economic aspirations due to excessive profit maximization, and thus seems to fail socially (Hassan et al., 2017).

PresenceIslamic Bankis expected to articulate Sharia (Islamic law) into practice in the banking industry(Ashraf & Lahsasna, 2017). This has philosophical consequences beyond mere commercial transactions. However, there is no standard tool to measure performance Islamic Bank (Ascarya & Yumanita, 2007). Bank sharia bank generally apply financial ratios and efficiency as a measure of performance, similar to conventional banks.

One of the important pillars of development banking sharia is sharia compliance. This is the main differentiator between Islamic banks And bank conventional. Forensure the application of the principles sharia in banking institutions requires sharia supervision, namely the Sharia Supervisory Board. In survey highlights, Bank Indonesia find that a number of customers who use Islamic banking services tend not to became a customer out of doubt on consistent application of sharia principles. Clients often question compliance sharia bank to principle sharia. This is indirectly shows that the practice of Islamic banking Not yet notice sharia principles that become one of the causes of public trust to bank sharia. Matter this too will influence loyalty residents for services Islamic Bank. Increasing customer trust is one of success indicator banking sharia and can be as predictor success banking sharia. consequence, sharia complianceis application sharia principles in the system employment. Characteristics the institution itself, specifically institution banking sharia. From the point of view of society, especially users sharia banking services, sharia compliance is key integrity and credibility banking sharia. It is given that trustand public trust to Islamic Bank built And maintained through application of principles Islamic law which applied accordingly rule institution operations. This is because non-compliance with sharia principles will have a negative impact to image banking sharia and can leave the candidate customers and users banking services sharia.

Bank sharia has show that they can finance their operations and make profits while Sharia requirements for no charge interest. Bank sharia has adjust the profit and loss distribution with various ways.First approachis through partnerships (musyarakah) or splits investmentin bank which is notpart of the management team. There is also a mudraba approach based on an additional feeresale orrent that called ijara, that isan interest-bearing western bank (Copyright, 2020).Functionthis bank will increase the stability of the banking system because it encourages banks todiversifyinvestment to minimize risk and increase profit.these practices,onturn,attract more investors and thereby help the bankForoperate more efficiently. Banking systemIslam is governed byfour different business laws. The first is principle jointly owned by the borrower And borrower.

Profit And gross loss. The second is fixed costs has been determined previously. The third is free rate flowers, and the fourth is combination of lenders and borrowers.

*Intellectual capital*able to provide information to investors in choosing to invest, so that investors are able to give more appreciation to companies that are able to process their intellectual capital optimally by providing higher value to the company. Therefore, measuring the performance of intellectual capital allows companies to monitor which parts need to be improved on the IC aspect, with the aim of the company being able to generate greater profits in the future.(Kamukama et al., 2011).

The importance of IC management is especially present in financial sector companies that must invest in the development of human capital, organizational processes, and knowledge-based companies in order to create a sustainable competitive advantage. Financial sector companies are exploring the advantages of a new client-oriented organization and the adoption of a new supervisory management system. For this reason IC and knowledge management emerged as core competencies for growing companies and as protectors of competitive advantage. The growth of service-based industries is increasing its emphasis on employee knowledge and creativity as added value to the business and highlighting the critical need for IC measurement and management.(Joshi et al., 2013).

Value added (VA) is the most objective indicator for assessing business success and shows the company's ability to create value (value creation).(Pulic, 2008). Furthermore, then proposes an indirect measurement of intellectual capital (IC) with a measure to assess the efficiency of added value as a result of the company's intellectual ability, namely using the Value Added Intellectual Coefficient (VAIC). Intellectual Capital (IC) in Islamic banking is not much different from the Pulic model, the difference lies in the accounts used to develop the VA formula(Ousama & Fatima, 2015). Intellectual Capital (IC) in Islamic banking is not much different from the Pulic model, the difference lies in the accounts used to develop the VA formula(Ulum, 2013).

As for several previous studies regarding Intellectual Capital (IC) influencing financial performance, among others, IC (VAIC™) can be an indicator to predict company performance in the future. In addition, this study also proves that investors may give different assessments of the three VAIC™ components (namely physical capital, human capital, and structural capital).(Chen et al., 2005). Research focusing on Islamic financial institutions (i.e. banks) has found that banks can use their IC resources efficiently with higher HCE compared to structural capital (SC) and the efficiency of capital employed(Aslama, 2012).

In addition, there are several previous studies which found that Intellectual Capital has no effect on financial performance, including the IC value formed from Human Capital Efficiency (HCE) has no effect on financial performance formed by the Return On Equity (ROE) indicator. These results indicate that the value added of the funds issued by the company for its employees does not contribute to improving the company's financial performance. HC is measured through the expenses incurred by the company for its employees, namely in the form of salaries and benefits(Princess & Nuzula, 2019)

METHODS

This research includes causality research, which is a type of research that explains the cause-effect relationship between several concepts or several variables through hypothesis testing.This study will conduct testingon the Intellectual Capital development model using E-VAIC Plus.

The population in this study were 24 Islamic BPRs. The data collection technique uses a documentation study by collecting secondary data, recording, and processing data related to this

research. The data used includes: published bank financial reports from 2018 to 2021.Data analysis technique is a technique performed by researchers in analyzing data. The secondary data will then be calculated for the value of each research variable according to the operational variables.

Panel data is data consisting of time series data and cross section data, but this data is more likely to be in the form of large cross section data but the number is very small or limited(Greene, 2012;Gujarati & Porter, 2009).Greene (2012)in his book entitled Generalized Regression Model and Equation System also explains the advantages of using panel data, namely being able to explain changes in phenomena that cannot be explained by time series data or cross section data. Besides that, the advantage of panel data is that researchers gain flexibility in modeling behavior, so that by using panel data researchers can develop estimation techniques and also theoretical results. The basic model used in panel data regression is as follows:

$$Y_{it} = \alpha + X_{it}^{'} \beta + \varepsilon_{it}$$ ....

Information:
Y   : dependent variable
X   : Independent variable
B   : Slope coefficient with dimensions Kx1 (K is the number of independent variables)
α   : Interception coefficient
I   : Cross data observation
t   : Time series
εit   : One-way interference (one-way error)

The assumptions regarding the intercept, slope, and error used in estimating panel data are:
a. *intercept*and Slope is constant in time and individual, while the error is different between time and individual.
b. *slopes*constant, but the Intercept differs between individuals.
c. *slopes*constant, and the Intercept differs between time and individuals.
d. *slopes*and Intercept differ between individuals
e. *slopes*and Intercepts differ between individuals and over time.

While the methods used to estimate panel data include: Pooled Regression, Fixed Effect and Random Effect.After carrying out several panel data regression tests, the next step is to conduct several tests on the panel data model, these tests include: Chow test, Hausman test and Lagrange Multiplier (LM) test.

The next step is to test the significance of the independent variable on the dependent variable. The test for the significance of the variable can be carried out in three stages, namely:
a. Partial test or individual test, partial test is carried out by conducting a statistical t-test to test the significance of each dependent variable. The hypothesis used in the partial test is:
   H0 = β ≠ 0, independent variables significantly influence.
   H1 = β ≠ 0, the independent variables do not have a significant effect.
   H0 is rejected if the t-statistic probability is less than 0.05, which means that the independent variables do not have a significant effect, and vice versa.
b. The F test or overall test is carried out to test the significance of all independent variables in influencing the dependent variable. The hypothesis used in this study are:
   H0 = β ≠ 0, all independent variables have a significant influence.
   H1 = β ≠ 0, all independent variables do not affect significantly.
If the probability value of the t-statistic is greater than 0.05 then H0 is rejected, which means that all independent variables do not have a significant effect, and vice versa.

RESULTS AND DISCUSSION

Based on the estimation results of the chow test from Table 1, it shows that the Chi-Square probability value (0.0000) is smaller than the critical probability (α=5% or 0.05). The meaning shows that the null hypothesis (H0) is rejected and H1 is accepted. Thus it is known that the model is good and appropriate using panel data regression analysis of the Fixed Effect model. Testing for determining the best model is continued by using the Hausman Test.

Based on the Hausman test in table 1, it is known that the Chi-Square probability value (0.7042) is greater than the critical probability (α = 5% or 0.05). The meaning shows that the null hypothesis (H0) is accepted and H1 is rejected. Thus it is known that the model is not good and is not appropriate using the panel data regression analysis of the random effect model.

Table 1. Results of Testing the CEM, FEM and REM Models

Variable	*Common Effects Model*	*Fixed Effects Model*	**Random Effect Model**
HCE	0.3084	0.0516	0.0619
Sce	0.9901	0.4626	0.4933
RCE	0.2343	0.9220	0.8511
CEE	0.5737	0.0490	0.1079
Adjusted R-square	0.118467	0.413105	0.129493
F-statistics	0.021513	0.000027	0.015576
Chow test			
Prob.	0.0000		
Hausman test			
Prob	0.7042		

Source: Results Processed by Eviews 12, 2023

This test aims to determine the effect of the independent variables on the dependent variable. The multiple linear regression equation model is as follows:
ROA = α + b1HCE + b2SCE + b3RCE + b4CEE +e

The following are the results of multiple linear regression analysis tests:
Table 2 Multiple Linear Regression Results

Variable	Coefficient
Constant	0.025
HCE	0.019
Sce	-0.043
RCE	1080
CEE	-0.015

The table above can be arranged multiple linear regression equation as follows:
ROA =0.025+0.019HCE- 0.043SCE+1080RCE- 0.015CEE + e

The t test is used to determine the effect of each independent variable on the dependent variable partially. The following are the criteria for this test: The significance level used is 5 percent, in other words if P (probability) > 0.05 it is declared not significant.

Table 3 Test Results t

Variable	t-Statistics	Prob.	Conclusion
HCE	1.6144	0.0516	No effect
Sce	1.9926	0.4626	No effect
RCE	-0.740	0.9220	No effect
CEE	0.0983	0.0490	Influential

Source :Eviews Results 12, 2023

The F test is used to determine the effect of all independent variables on the dependent variable simultaneously. Simultaneous test results are shown in Table 4 below:

Table 4 F Test Results

Test F (Prob)	Conclusion
0.000027	Influential

Source :Eviews Results 12, 2023

The results of the F statistical test in the table above to test the effect of HCE, SCE, RCE and CEE on Profitability, the Prob F Statistics value is 0.000027, this means that the significance level is <5% ($\alpha = 0.05$), which means that it can be concluded that HCE, SCE, RCE and CEE on Profitability

Human Capital Efficiency affects profitability

*human capital*does not affect profitability, so it can be said that the ups and downs of Human Capital do not affect the level of company profitability. This is because banking companies tend to use physical capital rather than intangible capital, namely human capital(Firer & Mitchell Williams, 2003). There are innovations owned by banking companies that tend to use operational tools, so they are more likely to reduce human resources. The human resources in the company are more focused on providing services that cannot be replaced by physical capital. As for other factors that can result in human capital not being able to provide added value to the company, such as the lack of utilization of the quality of human resources owned, the lack of salaries and benefits provided by the company to employees, the lack of motivating employees in increasing company revenue and profits.

This condition occurs because human resource management without being followed by improvement and efficiency in the company will not result in increasing profits. In addition, an increase in human capital will not necessarily provide good profitability because in managing human capital it must be adjusted to the competence of human resources owned, and the factor of competition from similar companies. These results do not support the stakeholder theory which states that companies work not only for their own interests but also for the interests of all stakeholders, such as increasing human capital will increase company profitability. This condition occurs because increasing profitability for the interests of stakeholders can not only be done by increasing human capital

Structural Capital Efficiency Affects Profitability

*structural capital*does not affect profitability, so that it can be said that the rise and fall of Structural Capital does not affect the level of company profitability. This shows that to create Value Added (VA) it does not require a combination of Human Capital (HC) and Structural Capital (SC). So that the higher the value of Structural Capital Efficiency has no effect on Return On assets. According toTan et al. (2007)Structural Capital Efficiency (SCE) ratio which measures the amount of Structural Capital (SC) needed to produce one rupiah of Value Added (VA) and is an indication of how successful Structural Capital (SC) is in creating value. In this study it appears that Structural

Capital (SC) does not play an important role in creating Value Added (VA) The results of this study are in accordance with the researchHidayat & Funds (2019)which gives the conclusion that Structural Capital Efficiency (SCE) has no effect on the company's Return On Assets (ROA).

Relational Capital Efficiency Affects Profitability

*relational capital*does not affect profitability, so it can be said that the rise and fall of relational capital does not affect the level of company profitability. Relational capital handles customer knowledge, which includes brands, loyalty, distribution channels and business collaboration. Marketing costs, namely advertising and distribution costs, are used to measure relational capital. However, in manufacturing companies, marketing costs may not be an appropriate indicator for measuring relational capital. This is not a factor that greatly influences the consumer's decision to buy something. Customers can consider other things such as price and product quality. Findings made byWang (2011)in line with the results of this study.

Relations with outsiders do not guarantee that the company's performance will increase. The company's performance will decrease because the relational capital increases. This can be caused by significant cultural and thinking differences, wrong marketing targets, wrong marketing methods, or different visions and missions from outside sources. Therefore, the company's performance will decrease because the relationship is getting improved. For example, if expenses continue to increase, the company will lose more and more. This is because the company has relationships with parties that are not profitable for the company. However, if the company continues to do marketing or relationship with these parties, even if the relationship is improved, the company's performance will definitely decrease. This can happen because the company does not pay attention to and evaluate its relative capital, which reduces its performance. The results of the analysis show that the Islamic BPRs sampled do not have the ability to build good relationships with outsiders and are unable to carry out marketing in accordance with company goals. As a result, the company's performance is influenced by the relationships it does with outsiders.

Capital Employed Efficiency Affects Profitability

Banking companies are more likely to use physical capital, so that the capital used can affect profitability. According to this study, the capital used is the value of assets that contribute to a business's ability to generate profits. So, if the capital used by a company is greater, then the total assets are also greater. Thus, the company's revenue will also increase.

This has the potential to increase the profitability of the company, which can be measured by return on assets (ROA). All of these assets are part of intellectual capital, which is an intangible asset that plays an important role in advancing the company's performance. The better a business manages the three components of intellectual capital, the better it manages its assets. Companies can increase the added value of their intellectual abilities if they can manage their assets properly and reduce operational costs.

According to the Resources based view, competitive advantage can be achieved through effective management of resources and knowledge, which in turn increases return on assets (ROA). By combining the capital (physical and financial) of employees, companies can achieve competitive advantage (Pulic, 1998). Business performance will be affected by the combination of capital it manages. If the company uses minimal capital, it is expected that sales will increase or if the company uses maximum capital, it is expected that sales will increase. The company has a harmonious relationship or association relationship with its partners, which results in increased sales. This relationship comes from quality and reliable suppliers, loyal customers who are satisfied with the services provided by the company, and the company's relationship with the government and the surrounding community. So, corporate social relations that are well managed internally and externally will have an impact on efficient production processes and be able to reduce unused production costs, which in turn will increase asset returns.Chen et al. (2005)found that capital

expenditure efficiency (CEE) has a positive impact on return on assets (ROA).
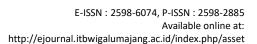
CONCLUSION

Based on the results of hypothesis testing and referring to the formulation and objectives of this study, the following conclusions can be drawnResearch results found*human capital*does not affect the profitability of increasing human capital will not necessarily provide good profitability because in managing human capital must be adjusted to the competence of human resources owned, and the factor of competition from similar companies. Structural capital has no effect on profitability. This shows that to create Value Added (VA), a combination of Human Capital (HC) and Structural Capital (SC) is not required. So that the higher the value of Structural Capital Efficiency has no effect on Return On assets. Capital Employed Efficiency affects profitability, this is because banking companies tend to use physical capital, so that the capital used can affect profitability.

This has implications for the futurefinancial statement users in making decisions to invest, investors can see Intellectual Capital, and*Islamicity Performance Index* which gives an influence on increasing profitability which is reflected through ROA to see an overview of how the company's conditions can be profitable or not as an investment medium. Because the greater the ROA, investors will be more interested in investing.

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