The Effect of Corporate Social Responsibility and Intellectual Capital on Business Performance of the Sharia Banks in Indonesia

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Abstract: The objective of this study is to evaluate and analyze 1) the effect of corporate social responsibility on the business performance of Islamic banks in Indonesia, 2) the effect of intellectual capital on the business performance of Islamic banks in Indonesia and 3) the mutual effects of the corporate social responsibility and the intellectual capital on the business performance of Islamic banks in Indonesia. The research type of this study was causative research. Data used in this study was secondary data. The object of this research was the report on the corporate social responsibility and the annual financial statements of Islamic banks in Indonesia during the 2009 to 2017 period. In testing the hypothesis, the technique of in data analysis was the multiple regression analysis by means of the SPSS software. The results showed that the intellectual capital (Value Added Intellectual Coefficient) had a positive and significant effect on the bank performance (Return on Assets) of Islamic banks. The corporate social responsibility had a negative and insignificant effect on bank performance (Return on Assets) of Islamic banks. The corporate social responsibility and intellectual capital mutually and significantly affect the business performance of Islamic banks in Indonesia.

Keywords: Corporate Social Responsibility, Intellectual Capital, Business Performance

1. Introduction

At the end of 2016, Indonesia was the world fourth destination for investment after India, Japan and China, where most of the investment took place in the banking industry. The survey results of United Nations Conference on Trade and Development (UNCTAD) in The World Investment Report 2017, Investment and the Digital Economy stated that the foreign direct investment for Indonesia globally increased as much as 5% or into USD 1.8 trillion in 2017. The high investment that entered Indonesia at the beginning of 2017 had put the country into the fourth ranks of the world investment destination with the investment rate for the banking sector during 2016 as it reached 20.1% (Liputan 6, 2017).

There are two types of banking industry in Indonesia, namely sharia-based banking (Islamic banks) and conventional banks. Islamic banks are the banks that collect funds from the public and redistribute them back to the community and participate in providing services in the traffic of payment and it is operated by implementing the sharia principles. Islamic banks perform their business operations based on the sharia principles, they avoid the usury practice and replace it with the investment concept that is based on profit sharing from financing the trade.

To find out the business performance of a bank, the financial statements that are periodically presented by the bank are used. According to Kasmir (2014), the assessment of the business performance of a bank can be seen in several aspects, including the Liquidity, Solvability, and Profitability. The most widely used ratio in assessing the business performance of banks is the return on assets (ROA). ROA is used to measure bank profitability because Bank of Indonesia as the supervisor and the controller of all the banks in Indonesia prioritizes a bank’s profitability based on the assets that are mostly coming from the public savings. Therefore, in this study, ROA is used to measure the business performance of the banks.

Gantino (2016) argues that one factor that affects the business performance of a company is the corporate social responsibility (CSR). Basically, the CSR activities of Islamic banks are closely related to the Sharia-based Banking principle as the consequence of its operation that is based on Islamic teachings. The social activities of Islamic banks are an added value which will result on the increase a long-term profitability and goodwill, as obtained from the positive image of their business and to increase the stakeholder’s trust in the performance of Islamic banks (Anto & Astuti, 2008).

The increase of the business performance of a bank should be supported by efficient asset management. Banks should manage and utilize their assets as well as possible to generate income from the banking operation. Moreover, the existence of knowledge society has changed the value creation of an organization. The future and the prospects of the organization will then depend on the ability of the management to utilize the hidden values of intangible assets (Ikhsan, 2004 in Astuti, 2005). In the conventional accounting systems, the intangible assets...
are not reported. Many companies focus more on their tangible assets. Therefore, it is important to evaluate these intangible assets, which one of them is the intellectual capital.

VAIC is a method developed by Pulic in 1997. It was designed to present information about the value creation efficiency of tangible assets and intangible assets owned by a company. This model starts with the company’s ability to create the value added (VA). Pulic (1998) believed that VA is the most objective indicator in assessing business success and in explaining a company’s ability to create the value (value creation). Thus, efficiency is the ability to create value-added from good management of intellectual capital components through the VAIC method (Ihyaul, 2008).

The VAIC method measures the efficiency of three types of company inputs, namely the human capital, the structural capital, and the physical and financial capital. The method consists of:

1. Value-added capital employed (VACA), which is an indicator for VA created by a unit of physical capital. This ratio indicates the contribution of each unit of CE on the value added of the organization.
2. Value-added human capital (VAHU), which indicates how much VA that could be generated from funds that are spent on labor.
3. Structural capital value added (STVA), which indicates the contribution of structural capital (SC) in value creation. STVA measures the number of SCs needed to produce 1 rupiah from VA and it indicates the success of SC in the value creation.
4. After obtaining the values of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA), it will generate the Value Added Intellectual Coefficient (VAIC).

Results of previous studies as conducted by Lestari (2012) have concluded that intellectual capital had a positive effect on the company performance. A study conducted by Muthia & Zulva (2017) also concluded that Corporate Social Responsibility had a positive effect on company performance. In this study, the researchers used two indicators that influence the company performance, namely corporate social responsibility (CSR) and intellectual capital.

2. Literature Review

**Return on Asset (ROA)**

Bank of Indonesia (2004) defines return on assets (ROA) as the profitability ratio which is used to measure the company’s effectiveness in generating profits through utilization of the owned assets. The Statistics for Financial Institution (2009) explains that a higher ratio indicates a higher profit achieved by the bank and a better bank’s position in terms of asset utilization.

Return on assets shows the extent of net income that could be acquired from the total assets owned by the company, so this ratio uses the number of income after tax and the company’s asset (in average). Net income after tax is the net income earned by the company from the core business (net operating income) or from outside the company’s core business (non operating income) for one period after it is subtracted with the income tax. The total assets are any rights that can be utilized for the company’s operation; one of the assets that can be included in the asset column is in the form of buildings or facilities. Therefore, if a company has a building that is worth one billion rupiahs, then the asset is counted as one billion rupiahs.

**Corporate Social Responsibility (CSR)**

Corporate social responsibility (CSR) is the responsibility of the company to be ethical toward the stakeholders, to minimize the negative impacts and to maximize the positive impacts that cover the social, economic and environmental aspects (or the triple bottom line) (Wibisono, 2007), in order to achieve sustainable development goals. The Act of the Limited Liability Company No. 40 of 2007, in article one point three, states that corporate social responsibility (CSR) is the company’s responsibility to social and environmental issues as a form of commitment to participate in a sustainable economic development and to improve the quality of life and the benefit of environment, both for the firm themselves, for the local communities, and for the society in general.

The CSR used in this study employed the Islamic Social Reporting (ISR). ISR is a standard for social performance reports of the companies that are based on Islamic law. Social Reporting is an extension of a
financial reporting system that reflects new and broader premises about the society, regarding the role of business communities for the economy (Hannifa, 2002). Islam has clearly explained the rights and obligations of the individuals and organizations based on the Quran and Hadeeth. Siwar and Hossain (2009) stated that the basic foundation of Islamic religion is the aqidah (belief and faith), worship, and morality and ethics.

Islamic Social Reporting (ISR) uses the sharia principles as its basic foundation. Sharia principles in the ISR have produced the aspects of the material, moral and spiritual that become the main focus of social activity reports of the company. ISR emphasizes more on social justice in its reporting aside from reporting on the interests of the environment, minority, and employee. This study uses the ISR framework with the main reference of Haniffa (2002) which is modified with the items found in the study of Othman et al. (2009). Followings are the six revealing themes in the ISR used in this study:

a. Funding and Investment.
   1) Usury (interest-free).
   2) Gharar (Uncertainty).
   3) Zakat.
   4) Policies for late payment of accounts receivable and the elimination of uncollectible accounts.
   5) Value Added Statement

b. Products and Services.
   1) Products that are environmentally friendly (green product).
   2) The halal status of a product.
   3) The quality and safety of a product.
   4) Consumer complaint handling.

c. Employee

Haniffa (2002) and Othman and Thani (2010) explained in their research that the public wants to know whether every employee in the company has been treated fairly and reasonably through information disclosure, such as wages, job characteristics, working hours per day, annual holidays, health insurance and welfare, policies related to the time and place of worship, education and training, equality of rights, and the appropriate work environment.

d. Society

The company provides assistance and contributions to the community with the purpose of increasing economic growth and helping to solve social problems in the community, such as by contributing to eradicating illiteracy, providing scholarships, and others (Othman and Thani, 2010).

e. Environment

This concept emphasizes the principle of balance, simplicity, and responsibility in preserving the environment. Therefore, information related to the resources utilization and programs used to preserve the environment should be included in the disclosure of the company’s annual report (Othman and Thani, 2010).

There are categories in these indicators and each category contains better details about the area of specific disclosure, and the indicators are marked using the code of 0 or 1. It is marked 0 if there is no information is disclosed and it is marked 1 if the company has performed several activities that are relevant to the encoded category.

**Intellectual Capital**

The definition of intellectual capital in Indonesia has been indirectly mentioned in PSAK No. 19 Revision 2000 (Indonesian Institute of Accountants, 2012) on intangible assets. Intangible assets are defined as non-monetary assets that could be identified and do not have a physical form.

Bontis (2000) defines intellectual capital as intrinsic knowledge inside the marketing channels and customer relationships developed by the organization through its business operation. Roos et al. (2008) stated that intellectual capital can be related to other disciplines such as corporate strategy and the production of measurement tools.
Based on the opinions of the experts, it is concluded that intellectual capital is an asset for companies in establishing the employees’ personality and character, so it could be the basic formula to form an efficient organization. Basically, the intellectual capital is established from the ability of the company’s management in managing the existing resources.

**Value Added Intellectual Coefficient (VAIC™)**

The method of value added intellectual coefficient (VAIC™) was developed by Pulic in 1997, and it was designed to present information about the value creation efficiency of the tangible assets and intangible assets owned by the company. The (VAIC™) is an instrument to measure the performance of a company’s intellectual capital. This approach is relatively easy and very possible to do because it is constructed from accounts in the company’s financial statements (balance sheet, income statement).

The model starts with the company’s ability in creating the value added (VA). Value added is the most objective indicator to assess the success of a business and to show the company’s ability in creating value. The VA is calculated as the margin between output and input.

The main components of VAIC as developed by Pulic could be seen from the company’s resources, namely the Human Capital, Structural Capital, and Capital Employed:

a. **Human Capital Efficiency (HCE)**

HCE indicates how much Value Added (VA) that could be generated from funds spent on the labor (Tan et al., 2007). Human capital represents a company’s ability to manage the knowledge capital of the individuals in the organization, and it is represented by its employees as the company’s strategic assets due to their knowledge possession. The relation between the VA and HC indicates that the HC exists to create value within the company. HC is obtained from the expenses related to the employees such as salary, benefits, and others.

b. **Structural Capital Efficiency (SCE)**

Structural Capital Efficiency (SCE) indicates the structural capital contribution that is needed to produce 1 rupiah from a company’s value added. In this Pulic model, SCE is calculated by dividing Structural Capital (SC) with Value Added (VA). SC is obtained from VA subtracted by HC. SCE shows the contribution of structural capital in the value creation, and the smaller the HC contribution in the value creation, the greater the SC’s contribution (Tan et al., 2007).

c. **Capital Employed Efficiency (CEE)**

CEE is an indicator for value added that is created from one unit of physical capital on the company’s value added. CEE is a ratio between Value Added (VA) and a physical model that works (CE). CE is obtained from the total equity and the company’s net income. In the process of value creation, the potential of intellectuals that is represented in the employee costs is not counted as an expense (input). Pulic assumes that if one unit from CE on a company has produced a greater return, it means that the company is better at utilizing the CE (or available funds) (Tan et al, 2007).

3. **Conceptual Framework**

The relationship between the corporate Social Responsibility and intellectual capital variable as an independents variable and business performance as the dependent variable is shown in Figure 1 as follows:
The Effect of Corporate Social Responsibility and Intellectual Capital on Business Performance of the Sharia Banks in Indonesia

Hypothesis

Based on the theory and background of the problems stated above, the following hypotheses were formulated:

H1: Corporate Social Responsibility has a positive and significant effect on Business Performance of the sharia banks in Indonesia.

H2: Intellectual capital has a positive and significant effect on Business Performance of the sharia banks in Indonesia.

H3: Corporate Social Responsibility and Intellectual Capital has a positive and significant effect on Business Performance of the sharia banks in Indonesia.

4. Research Method

In this study, the object of research is the annual financial statements of Islamic banks in Indonesia, from 2011 to 2017 with a total of 77 annual reports of the Islamic banks. The data were analyzed using a multiple linear regression analysis approach and the SPSS software.

Operational Definition of the Research Variables

1. Return On Assets

The ratio of return on assets is stated as:

\[
ROA = \frac{\text{Net Income after Tax}}{\text{Total Asset}}
\]

2. Corporate Social Responsibility Index (CSRI) is stated as:

\[
CSRD_j = \sum X_{ij} \times 100\%
\]

Note:
- \(CSRD_j\): CSR Disclosure Index of company \(j\)
- \(nj\): total item for the company \(j\), \(nj \leq 79\)
- \(X_{ij}\): dummy variable: 1 = if the item \(i\) is disclosed; 0 = if the item \(i\) not disclosed

3. Value added intellectual coefficient (VAICT™)

a. Value Added Capital Employed

\[
VACA = \frac{VA}{CE}
\]

\(VA = \text{Output} - \text{Input}\)

Note:
- An output is total sales and other income.
- Input is the total expense other than the labor expenses.
- CE is capital employed (funds available from equity and net income).

b. Value added human capital (VAHU)

\[
VAHU = \frac{VA}{HC}
\]

Note:
- HC is the labor expenses (the salary expense as stated in the financial statements).
c. Structural capital value added (STVA)
STVA = SC/VA
Note:
   SC = VA – HC

The final ratio to measure the VAICTM is:
VAICTM = VACA + VAHU + STVA

5. Research Results and Discussion

After data about the Return on Assets (ROA) were accumulated, the intellectual capital and corporate social responsibility (CSR) from each Islamic banks were classified. The first step was to perform the outlier test on the data. Before the outlier test was carried out, data were previously standardized using the Z score, so new variables such as ZROA, ZVAIC, and ZCSR emerged. These standardized data were then processed with the outlier tests using the box-plot method on each variable. The outlier from the ZROA variable is the data no. 22, 42, 56, 68, 69, and 70. The outlier from the ZVAIC variable consists of data no. 20, 25, 56, 68, and 69. The ZCSR variable does not have outlier. Based on the results of the outlier test, there are 8 outliers consisting of data No. 20, 22, 25, 42, 56, 68, 69, and 70. Data that were identified as outlier were then excluded from the research, and the data were then processed into the next test, the normality test.

The normality test was performed by regarding the skewness and kurtosis values. Data will be stated as normal if the skewness and kurtosis values are between +2.5 and -2.5. Table 1 shows the results of the normality test using the SPSS software.

<table>
<thead>
<tr>
<th>Table 1. Normality Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skewness</strong></td>
</tr>
<tr>
<td>Zscore(ROA)</td>
</tr>
<tr>
<td>Zscore(VAIC)</td>
</tr>
<tr>
<td>Zscore(CSR)</td>
</tr>
</tbody>
</table>

**Source:** Primary Data Process (2018)

Normality test in Table 1 shows that the values of skewness and kurtosis are in the range of +2.5 and -2.5. Thus, it can be stated that the data used in the study were normally distributed. After the data had fulfilled the overall requirements, such as that there were no outlier and the data were normally distributed, then the analysis of multiple linear regression was performed. The regression results are shown in the table below:

<table>
<thead>
<tr>
<th>Table 2. Multiple Regression Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Zscore(VAIC)</td>
</tr>
<tr>
<td>Zscore(CSR)</td>
</tr>
</tbody>
</table>

**Source:** Primary Data Process (2018)

Based on the results in Table 2, the equation of the multiple linear regressions is formulated as follows:

Y = 0.163 + 0.281VAIC – 0.041CSR

From the above equation, the explanation is:

a. The constant value is 0.163 and has positive direction, which means that even without the existence of VAIC and CSR variables, Islamic banks in Indonesia are still able to have good performance through generating profits for the company, with a positive ROA value.

b. The regression coefficients of the variables (intellectual capital — value added intellectual coefficient) are 0.281 and are in a positive direction. This means that VAIC has a positive influence on the company’s performance in generating ROA. If the value of VAIC increases, the company’s ROA will also increase, presuming the influence of other variables is zero.
The Effect of Corporate Social Responsibility and Intellectual Capital on Business Performance of the Sharia Banks in Indonesia

c. The regression coefficient of the variable (corporate social responsibility) is 0.041 and is negative. This means that the CSR has a negative effect on the company’s ability to generate ROA. If the CSR increases, then the company’s ROA will decrease, assuming other variables’ effect is zero.

After the data were analyzed with a multiple linear regression, then to find out the influence of the independent variable on the dependent variable, an analysis of coefficient determination ($R^2$) was performed. The results of the coefficient determination test ($R^2$) in this study can be seen in the table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.343$^a$</td>
<td>.118</td>
<td>.091</td>
<td>.33248912</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zscore(CSR), Zscore(VAIC)
b. Dependent Variable: Zscore(ROA)

Source: Primary Data Process (2018)

From Table 3 above, it can be seen that obtained value of the R Square is 0.118. That is, the performance of Islamic banks in Indonesia during the 2009-2017 period can be explained through the independent variables of Intellectual Capital and corporate social responsibility which amounted to 11.8%. The remaining 88.2% is explained by other variables that were not included in this study. This means that in achieving the business performance of Islamic banks in Indonesia that is measured by return on assets (ROA), only a few were affected by the variables of Intellectual Capital and corporate social responsibility. Although it has a slight effect, these two variables collectively have a significant effect to increase the ROA of Islamic Banks in Indonesia as seen in Table 4 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.975</td>
<td>2</td>
<td>.488</td>
<td>4.411</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>7,296</td>
<td>66</td>
<td>.111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8,271</td>
<td>68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore(ROA)
b. Predictors: (Constant), Zscore(CSR), Zscore(VAIC)

Source: Primary Data Process (2018)

The Effect of Intellectual Capital (Value Added Intellectual Coefficient) on the Bank Performance (Return on Assets) in Commercial Islamic Banks in Indonesia

Based on the results, it was found that the intellectual capital has a positive and significant effect on the performance of the go-public Islamic banks in Indonesia on the period of 2011-2017. This is proven by the positive result of the intellectual capital coefficient test of 0.281 and the calculated t-value of 2.729 with a significance of 0.008 <0.05. The significant value indicates that the alterations in intellectual capital have affected the performance. That is, if the intellectual capital is changed, then it will affect the bank performance. Thus, the first hypothesis which states that the intellectual capital has a positive and significant effect on the performance is accepted.

This explains that intellectual capital that has been spent by Islamic banks directly affects the bank’s efforts to achieve a better performance. In this case, the bank has been able to utilize its intellectual capital to achieve the company’s goal, namely by increasing the company’s profit by increasing the return on assets (ROA). It means that in the context of the banking industry in Indonesia, especially Islamic banks, banks have been able to optimally manage and develop their intellectual property to win the competition, using the company’s competitive advantage as indicated by the impact of IC on increasing the company’s ROA.

The Effect of Corporate Social Responsibility on Bank Performance (Return on Assets) of Islamic Banks in Indonesia

McGuire et al (1998), in Balabanis, Phillips, and Lyall (1998) explained that a company’s reputation could be increased with the presence of CSR activities, which can improve a bank’s relations with the investors and governmental institutions, and these relationships are reflected in the economic benefits of the company. This
will trigger the improvements in the company’s finances, which increase the company’s profits and it will be followed by an increase in the financial performance of the following year.

However, based on the study results, it was found that the corporate social responsibility has a negative and insignificant effect on the performance of Islamic banks in Indonesia during the 2011-2017 period. This is proven by the test results of the coefficient of corporate social responsibility which is a negative of 0.041 and the t-value calculated is -1.031 with a significance level of 0.306 > 0.05. This significant value indicates that the disclosure of the corporate social responsibility does not affect performance. It means that disclosure of corporate social responsibility of Islamic banks is considered to have a negative impact on company profits since the excessive CSR activities will increase the company’s load, and it will then reduce the company profits, even though the decline in company profits is not significant. Thus, the second hypothesis which states that the corporate social responsibility has a positive and significant effect on the performance is rejected.

The insignificance of the results is interpreted as the higher the index of CSR disclosure of the company does not have a significant effect to increase the returns on assets for the company’s operation or the return on assets (ROA) obtained by the company. This study supports the results of the research by Fauzi et al (2007), that the corporate social responsibilities do not show a significant relationship with the ROA. This result is supported by the argument that the existence of CSR activities is a cost that could reduce or could not significantly increase the company’s net income. An increase in assets, if it is not balanced with an increase in profit, will result in a low ratio of return on asset (ROA).

**The Collective Effect of Corporate Social Responsibility and Intellectual Capital on the Business Performance of Islamic Banks in Indonesia**

Based on the results, it was found that the corporate social responsibility and intellectual capital collectively affect the business performance of Islamic banks in Indonesia. The results of this study are in line with the research conducted by I Gusti (2017) which states that the intellectual capital, corporate social responsibility, and good corporate governance collectively affect the company’s performance (ROE). This reflects the company’s responsibility to the stakeholders to be ethical, to minimize the negative impacts and to maximize the positive impacts, and that this act of responsibility affects its business performance. Meanwhile, the intellectual capital is an asset for companies in establishing the employee’s personality and character, so that it could be the basis to form an efficient organization. Basically, the intellectual capital could be established from the ability of the company’s management in managing the resources so that it could improve its business performance.

6. **Conclusion**

Based on the results of data processing, it is concluded that:
1. Intellectual Capital (Value Added Intellectual Coefficient) has a positive and significant effect on bank performance (Return on Assets) of Islamic Banks in Indonesia.
2. Corporate Social Responsibility has a negative and insignificant effect on the Return on Assets of Islamic Banks in Indonesia.
3. Corporate social responsibility and intellectual capital collectively affect the business performance of Islamic Banks in Indonesia.

**References**