The Influence of Intellectual Capital and Good Corporate Governance on Profitability at Conventional Commercial Banks in Indonesia

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Abstract

This research aims to determine the influence of Intellectual Capital (IC) and Good Corporate Governance (GCG) on profitability in conventional commercial banks listed on the Indonesia Stock Exchange in 2015-2019. Independent variables in this study are intellectual capital consisting of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA) and Good Corporate Governance (GCG). While the dependent variable in this study is profitability. This research uses a quantitative approach with the panel's data regression analysis method. The results found in this study are that IC and GCG simultaneously affect profitability, while partially VACA and VAHU have a positive effect on profitability, STVA has no effect on profitability, and GCG negatively affects profitability.

Keywords

Conventional Commercial Banks, Good Corporate Governance, Indonesia, Intellectual Capital

1. Introduction

Conventional banks according to Law No. 10 of 1998 concerning Banking are banks that carry out conventional business activities that in their activities provide services in payment traffic. Based on data from Indonesia Banking Statistics, in 2015-2019 the number of conventional commercial banks and the number of conventional commercial bank branches decreased every year. However, the decline in the number of conventional commercial banks is inversely proportional to the total growth of third-party funds raised by banks. This shows that the decline in the number of conventional commercial banks does not affect public confidence in banking in carrying out its function, namely to raise funds in the form of current accounts, savings, and or deposits. With the high level of public confidence in banking has a good impact on the profitability of banks and contributes to improving the national economy.
Based on Figures 1 (a) and (b), the value of pretax profit and total assets of conventional commercial banks from 2015 to 2019 experienced an increasing trend. With the development of the value of pre-tax profits and total assets, conventional commercial banks should be able to produce ROA value that increases every year. However, based on data from Banking Statistics Indonesia in 2015 to 2016 shown through Figure 1 (c), when pre-tax profits and total assets increased, the value of ROA generated by the company actually decreased.

The optimal ROA value can be achieved by the company through intangible assets. Intangible assets can be assessed and measured by the intellectual capital (IC) approach (S.W. & Firmansyah 2012). Intellectual capital that includes information, knowledge, and experience can be used as a long-term plan for the company to increase competitiveness and added value in the company to be able to compete in the industrial world (Aida & Rahmawati 2015). According to Pulic (2000) in Ulum (2008), the intellectual capital component is generally divided into three which are then called the value added intellectual coefficient (VAICTM method). The method consists of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA). With good utilization of intellectual capital, the company's ROA value will also increase. Previous research has suggested that intellectual capital affects profitability (Hasan et al. 2017; Putri & Suzan 2019; Singla 2020).

In carrying out operational activities, the company needs optimal profit to achieve the company's goals. Good Corporate Governance (GCG) is one of the efforts that can be made by companies to optimize profits. With the consistent implementation of GCG, the company will develop well, because the value and competitiveness of the company will increase so that trust between shareholders and stakeholders is formed (Gholy & Nadya 2020). By the increasing confidence of stakeholders to invest, the bank's profit will increase. There are differences in the results of previous research on good corporate governance towards profitability. According to research Gholy & Nadya (2020) and Desiana et al. (2016) good corporate governance has a positive effect on profitability, while according to research Shidieq & Yuliandari (2015) good corporate governance negatively affects profitability.

1.1 Objectives
The purpose of our research is to determine the effect of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), Structural Capital Value Added (STVA), and Good Corporate Governance (GCG) on profitability in conventional commercial banks listed on the Indonesia Stock Exchange. in 2015-2019.

2. Literature Review

2.1 Teori Resource Based (Resource Based Theory)
Resource based is a managerial framework used to determine strategic resources that companies can leverage to achieve sustainable competitive advantage. The organization's internal resources are the main focus in resource based which serves as an organizing tool to gain competitive advantage (Ghozali 2020:158). Barney (1991) in Ghozali (2020:159) said that competitive advantage is a condition of companies that are able to realize potential strategies to
create value through different ways, rare, and cannot be imitated by competitors. Resource-based says that a company's success is determined by past experience, organizational culture, and competence.

2.2 Intellectual Capital
Stewart (1997) in Nuryaman (2015) stated that intellectual capital is an intangible asset that is able to create added value for the company. Such assets can be knowledge, information, human and organizational resource experience, customer relations, and team communication systems. Bontis et al. (2015) in Rusdiyanto et al. (2019:130) state that intellectual capital has three components, namely: (1) capital employed (CE), which is intangible assets owned by the company in the form of the company's ability to maintain good relations with its partners and knowledge of marketing for creating added value for the company (Nuryaman 2015). Value Added Capital Employed (VACA) is used to calculate the contribution made by each CE unit in generating value added for the company. Good CE management can improve the company's financial performance so that it can increase the company's profit (Kartika & Hatane 2013). Companies that have a high profitability value show that the company is able to use its assets optimally. Thus, the higher the value of capital employed by a company, the higher the profitability value of the company. This is in line with research. Previously conducted by Putri & Suzan (2019), Kazhimy & Sulasmiyati (2019), Febrianty & Febriantoko (2018) which stated that VACA has a positive influence on profitability.

The next component of intellectual capital is human capital (HC), which is an intangible asset owned by the company in the form of intellectual ability, creativity and innovation owned by its employees (Nuryaman 2015). Value Added Human Capital (VAHU) specifically calculates HC efficiency by showing marginal contributions per unit of employee expenditure to the company's value added. The maximum management of HC by the company is shown from how much value added is generated from each rupiah issued by the company so that it can produce quality resources. That is, with the knowledge, skills, abilities, talents, experience and knowledge possessed, HC will be able to manage other assets of the company to get a high profit. Based on previous research, this is evidenced in Kazhimy & Sulasmiyati (2019), Hasan et al. (2017), Nurhasanah et al. (2017) which states that VAHU has a positive influence on profitability.

The last component of intellectual capital is structural capital (SC), which is a supporting component of HC to maximize performance in the company. SC includes information systems, databases, organizational processes and procedures, and the infrastructure needed to support the implementation of organizational strategies (Sumedrea 2013). STVA shows the contribution made by each SC unit to generate value added for the company (Meles et al., 2016). Optimal SC management shows that the company manages assets and costs well so as to generate maximum profits. This is in line with previous research conducted by Putri & Suzan (2019), Kazhimy & Sulasmiyati (2019) which stated that STVA has a positive influence on profitability.

2.3 Good Corporate Governance
According to Sutedi (2011), GCG is a system that regulates and controls companies to create value added for all stakeholders. The implementation of GCG in the banking industry must be based on five basic principles regulated by Bank Indonesia Regulation No. 8/4/PBI/2006, namely transparency, accountability, responsibility, independence, and fairness. In applying these five basic principles, Bank Indonesia Circular Letter Number 15/15/DPNP/2013 requires banks to periodically conduct self-assessments on the adequacy of GCG implementation and compile implementation reports.

In the banking industry, in order to continue to develop and advance, the implementation of GCG seriously and effectively becomes a demand that cannot be bargained anymore (Sutedi 2011). The implementation of good GCG shows stakeholders that banks implement these principles that will give confidence for stakeholders to invest. By the increasing confidence of stakeholders to invest, the bank's profit will increase. This is in line with previous research conducted by Gholy & Nadya (2020), Krisdayanti et al. (2019), Ghalib (2018) which states that GCG has a positive influence on profitability.

3. Methods
This research is associative research with a quantitative approach. The population in this study is a conventional commercial bank listed on the Indonesia Stock Exchange from 2015 to 2019. The collection of data from the data uses the financial statements presented on the Indonesia Stock Exchange. The sampling method used in this study is purposive sampling which is a sampling technique with certain considerations, namely: (1) conventional commercial
banks listed on the Indonesia Stock Exchange in 2015-2019, (2) commercial banks Conventional non-consistently published financial statements on the Indonesia Stock Exchange during the observation year in 2015-2019, and (3) conventional commercial banks that did not include GCG reports on annual reports during the observation year in 2015-2019. Based on the predetermined sample criteria, the number of samples used in this study is 33 conventional commercial banks listed on the Indonesia Stock Exchange with a research time period of five years, then the total observations are made 165.

The study used the multicollinearity test and the heteroskedasticity test as classic assumption tests. The study used a regression analysis of panel data to measure the intensity of the relationship between two or more variables (Bahri, 2018:195). The panel data regression model used in this study is the random effect model (REM). Based on the analysis of panel data using the Eviews program, the following hypotheses will be proposed:

H1 : Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA) simultaneously affect the profitability of conventional commercial banks listed on the IDX in 2015-2019

H2 : Value Added Capital Employed (VACA) partially has a positive effect on profitability at conventional commercial banks listed on the IDX in 2015-2019

H3 : Value Added Human Capital (VAHU) partially has a positive effect on profitability at conventional commercial banks listed on the IDX in 2015-2019

H4 : Structural Capital Value Added (STVA) partially has a positive effect on profitability at conventional commercial banks listed on the IDX in 2015-2019

H5 : Good Corporate Governance partially has a positive effect on profitability at conventional commercial banks listed on the IDX in 2015-2019

3.1 Measures

3.1.1 Value Added Capital Employed (VACA)

Value Added Capital Employed (VACA) shows the contribution made by each CE unit to generate added value for the company (Khairiyansyah & Vebtasvili 2018). Pulic (1998) argues that if the return generated from 1 unit of CE is greater than other companies, then the company is managing CE well (Ulum 2008). Good CE management can improve the company's financial performance (Kartika & Hatane 2013). VACA can be calculated using the following formula.

\[ VACA = \frac{\text{Value Added (VA)}}{\text{Capital Employed (CE)}} \]

Information: value added (the difference between total revenue and total operating expenses, except employee expenses), capital employed (equity).

3.1.2 Value Added Human Capital (VAHU)

Value Added Human Capital (VAHU) specifically calculates the efficiency of human capital (HC) by showing the marginal contribution per unit of employee expenditure to the company's added value. Pulic (2004) states that in addition to being a production expense, employee expenses are also considered an investment for the company (Meles et al., 2016). VAHU can be a picture of the company's performance in managing its human resources to achieve efficient profits (Saraswati & NR, 2018). VAHU can be calculated using the following formula.

\[ VAHU = \frac{\text{Value Added (VA)}}{\text{Human Capital (HC)}} \]

Information: value added (the difference between total revenue and total operating expenses, except employee expenses), human capital (employee expenses).

3.1.3 Structural Capital Value Added (STVA)

Structural Capital Value Added (STVA) shows the contribution made by each SC unit to generate added value for the company (Meles et al., 2016). SC is not an independent component like CE and HC, because SC is a supporting component of HC to maximize performance in the company. That is, the greater the contribution of HC to generate value added, then the contribution of SC will be smaller in this regard (Meles et al., 2016). STVA can be calculated using the following formula.

\[ STVA = \frac{\text{Structural Capital (SC)}}{\text{Value Added (VA)}} \]
Information: structural capital (the difference between value added and employee expenses), value added (the difference between total income and total operating expenses, except employee expenses)

3.1.4 Good Corporate Governance (GCG)
The proxy used to measure GCG is the composite value in accordance with the provisions of PBI No. 13/1/PBI/2011. The higher the GCG self-assessment of a bank, the better the implementation of GCG in that bank.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Composite Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Pretty good</td>
</tr>
<tr>
<td>4</td>
<td>Not good</td>
</tr>
<tr>
<td>5</td>
<td>Bad</td>
</tr>
</tbody>
</table>

4. Results and Discussion
4.1 Numerical Results

Table 1. Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th>Information</th>
<th>ROA</th>
<th>VACA</th>
<th>VAHU</th>
<th>STVA</th>
<th>GCG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>-0.133543</td>
<td>-0.426425</td>
<td>-13.85798</td>
<td>-4.389725</td>
<td>1.000000</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.132466</td>
<td>0.507058</td>
<td>5.460226</td>
<td>9.945731</td>
<td>4.000000</td>
</tr>
<tr>
<td>Mean</td>
<td>0.010110</td>
<td>0.175510</td>
<td>1.684291</td>
<td>0.532383</td>
<td>2.078788</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.024041</td>
<td>0.143546</td>
<td>1.662290</td>
<td>1.016021</td>
<td>0.505915</td>
</tr>
<tr>
<td>Observations</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
</tr>
</tbody>
</table>

Descriptive statistics are statistics used to analyze data by describing the data that has been collected as is without intending to make conclusions that apply to the public or generalizations (Table 1) (Sugiyono, 2017:147).

Table 2. Multicollinearity test results

<table>
<thead>
<tr>
<th></th>
<th>VACA</th>
<th>VAHU</th>
<th>STVA</th>
<th>GCG</th>
</tr>
</thead>
<tbody>
<tr>
<td>VACA</td>
<td>1.000000</td>
<td>0.753710</td>
<td>-0.246624</td>
<td>-0.434043</td>
</tr>
<tr>
<td>VAHU</td>
<td>0.753710</td>
<td>1.000000</td>
<td>-0.126526</td>
<td>-0.436148</td>
</tr>
<tr>
<td>STVA</td>
<td>-0.246624</td>
<td>-0.126526</td>
<td>1.000000</td>
<td>0.040137</td>
</tr>
<tr>
<td>GCG</td>
<td>-0.434043</td>
<td>-0.436148</td>
<td>0.040137</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

The multicollinearity test was carried out to test whether the regression model found a correlation between the independent variables (Ghozali, 2018). To find out that a regression model has multicollinearity is to look at the coefficients between independent variables, if the coefficient value between independent variables > 0.8 then multicollinearity occurs, and if the coefficient value between independent variables < 0.8 then multicollinearity does not occur. Based on Table 2 the coefficient value between independent variables, there is no variable that has a value of more than 0.8. These results can be concluded that there is no multicollinearity between independent variables.

Table 3. Heteroskedasticity Test Results

<table>
<thead>
<tr>
<th>Obs*R-squared</th>
<th>7.892</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob. Chi-Square</td>
<td>0.850</td>
</tr>
</tbody>
</table>

This study uses a white test to test heteroscedasticity by looking at the value of Prob Obs*R squared. If the value of Prob Obs*R squared > 0.05, then there is no heteroscedasticity. Based on Table 3 of the results of the heteroskedasticity test by white test shows the value of Prob Obs*R squared 0.8505 > 0.05. The results can be
concluded that there is no heteroskedasticity.

Table 4. Random Effect Model test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.0173</td>
<td>0.007</td>
<td>2.459</td>
<td>0.015</td>
</tr>
<tr>
<td>VACA</td>
<td>0.026</td>
<td>0.013</td>
<td>1.945</td>
<td>0.042</td>
</tr>
<tr>
<td>VAHU</td>
<td>0.006</td>
<td>0.001</td>
<td>6.149</td>
<td>0.000</td>
</tr>
<tr>
<td>STVA</td>
<td>-0.0008</td>
<td>0.001</td>
<td>-0.759</td>
<td>0.448</td>
</tr>
<tr>
<td>GCG</td>
<td>-0.011</td>
<td>0.002</td>
<td>-3.840</td>
<td>0.0002</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td></td>
<td>0.547</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td></td>
<td></td>
<td>0.536</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td></td>
<td></td>
<td>48.437</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 4 the adjusted value of R-squared in this study was 0.536 or 53.64%. This shows that VACA, VAHU, STVA, and GCG variables affect profitability by 53.64% and the remaining 46.36% are influenced by other independent variables not used in the study.

The regression equations of the panel data in this study are as follows:

ROA = 0.0173 + 0.0269VACA + 0.0067VAHU - 0.0008STVA - 0.0110GCG

4.2 Validation

The effect of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA) on Profitability

Based on the results in Table 4 that the prob value (F-statistic) is 0.000000 which is smaller than the significance value of 0.05 (5%). This shows that Ha is accepted, then the independent variables in this study, namely VACA, VAHU, STVA, and GCG simultaneously affect the dependent variable, namely profitability at conventional commercial banks listed on the Indonesia Stock Exchange in 2015–2019.

4.2.1 The Effect of Value Added Capital Employed (VACA) on Profitability

Based on the test results in Table 3, VACA has a probability value of 0.0424 < 0.05 with a coefficient of 0.026, it can be interpreted that the VACA variable has a positive effect on profitability in conventional commercial banks listed on the Stock Exchange Indonesia in 2015–2019.

Known from 165 samples, there were 89 samples that had above-average VACA values consisting of 74 samples with ROA values above average and the remaining 15 samples with values ROA.

Below average. Of the 76 samples that had below average VACA scores, 17 had ROA values above average and the remaining 59 samples had below average ROA values. The results showed that the highest number of samples was found in data samples that had above-average VACA values with above-average ROA values. This shows that the higher the capital employed owned by the company, the higher the profitability value or ROA in the company. Capital employed provides added value or value added to the company by creating and maintaining good relationships with its external partners. The company's ROA value can increase if the company is able to make good use of capital employed because capital employed contributes to the company in generating profits. The results of this study are in line with previous research conducted by Febrianty & Febriantoko (2018), I. R. A. Putri & Suzan (2019), and Kazhimy & Sulasmiyati (2019) which stated that VACA has a positive effect on profitability.

4.2.2 The Effect of Value Added Human Capital (VAHU) on Profitability

Based on the test results in Table 4.12, VAHU has a probability value of 0.0000 < 0.05 with a coefficient of 0.006752, it can be interpreted that the VAHU variable has a positive effect on profitability in conventional commercial banks listed on the Stock Exchange Indonesia in 2015–2019.
From 165 samples, there were 88 samples with above-average VAHU values consisting of 78 samples with ROA values above average and the remaining 10 samples with below average ROA values. While of the 77 samples that had below average VAHU values, there were 13 samples that had ROA values above average and the remaining 64 samples had ROA values below average. The results showed that the highest number of samples was found in data samples that had above-average VAHU values with above average ROA values. This shows that the higher the human capital owned by the company, the higher the profitability value or ROA of the company. Human capital provides added value or value added to the company through human resources with all the knowledge, skills, abilities, talents, experience, and motivation and commitment to organization and its values to implement the company's strategy. The company's ROA value can increase if the company is able to make good use of human capital because human capital contributes to the company in generating profits. The results of this study are in line with previous research conducted by Meles et al. (2016), Saraswati & NR (2018), and Kazhimy & Sulasmiyati (2019) stated that VAHU has a positive effect on profitability. VAHU can be an overview of the company's performance in managing its human resources to achieve efficient profits (Saraswati and NR, 2018).

4.2.3 The Effect of Structural Capital Value Added (STVA) on Profitability

Based on the test results in table 4.12, STVA has a probability value of 0.4488 > 0.05 with a coefficient of -0.000841, it can be interpreted that the STVA variable has no effect on profitability in conventional commercial banks listed on the Indonesia Stock Exchange in 2015-2019.

It is known from 165 samples, there are 62 samples that have STVA values above the average consisting of 44 samples with ROA values above average and the remaining 18 samples with ROA values below average. While of the 103 samples that had STVA values below average, there were 47 samples with ROA values above average and the remaining 56 samples had ROA values below average. The results showed that the highest number of samples was found in data samples that had below-average STVA values with below-average ROA values. This indicates that the rise or decrease of STVA indigo has no effect on ROA values. The company cannot increase profitability with the funds spent on SC. SC is a support component of HC to maximize performance in the company. SC is a component consisting of information systems, databases, organizational processes and procedures, and the infrastructure needed to support the implementation of organizational strategies (Sumedrea 2013). Value added generated from HC in conventional commercial banks has a large value, therefore SC contribution to produce value added will be smaller. The results of this study are in line with Febrianty & Febriantoko (2018) which states that STVA has no effect on profitability.

4.2.4 The Effect of Good Corporate Governance on Profitability

Based on the test results in table 4.12, GCG has a probability value of 0.0002 < 0.05 with a coefficient of -0.011029, it can be interpreted that the GCG variable negatively affects profitability in conventional commercial banks listed on the Indonesia Stock Exchange in 2015-2019.

It is known from 165 samples, there are 26 samples that have above-average GCG values consisting of 2 samples with ROA values above average and the remaining 24 samples with ROA values below average. While of the 139 samples that have below average GCG values, there are 89 samples that have ROA values above average and the remaining 50 samples have ROA values below average. The results showed that the highest number of samples was found in data samples that had below-average GCG values with above-average ROA values. This shows that the smaller the GCG value of a company, the higher the ROA value in the company. The company that has the maximum ROA value in 2015, namely PT Bank Rakyat Indonesia Agro Niaga Tbk, has a value or GCG rating below the average, which is 2,0000. In 2016-2019, PT Bank Central Asia Tbk has a maximum ROA value with a GCG value below the average of 1,0000 and 2,0000. The results of this study are in line with previous research conducted by Shidiq & Yuliandari (2015) which stated that GCG negatively affects profitability.

5. Conclusion

The results found in this study are value added capital employed, value added human capital, structural capital value added, and good corporate governance simultaneously affect profitability in conventional commercial banks listed on the Indonesia Stock Exchange in 2015-2019. While partially, VACA and VAHU have a positive effect on profitability, STVA has no effect on profitability, and GCG has a negative effect on profitability. This research is
expected to add to the existing literature. However, the authors suggest future studies to add other variables not used in the study as well as choose other sectors. For companies, it is recommended to pay attention to factors that affect the company's profitability, namely by increasing the value added capital employed, value added human capital, and lowering the value of good corporate. Governance to get maximum profitability. For investors, it is recommended before making a decision in investing in order to pay attention to the value added capital employed and the high value added of human capital and low good corporate governance rating. This is based on the results of research that shows that value added capital employed, value added human capital, and good corporate governance affect profitability so that it can be considered by potential investors in decision making.

References

**Biographies**

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