Conference Paper


Yusar Sagara and Chikita Chairunissa
UIN Syarif Hidayatullah Jakarta, Indonesia

Abstract

This study is aimed to examine the effect of intellectual capital, CSR disclosure and capital structure proxied with debt equity ratio (DER) on financial performance proxied with return on asset (ROA). This research was a quantitative study. The type of data used was secondary data obtained from www.idx.co.id and the company website. The analysis method used was multiple linear regression analysis using SPSS version 22 software. The population in this research was basic industry and chemical companies listed in Indonesia Stock Exchange during the period of 2013-2016. While the samples of this study were determined by using purposive sampling method in order to obtain a total of 100 data that could be processed, the result of this study indicated that intellectual capital had a positive effect and capital structure negatively affected the financial performance of the company. Meanwhile, the disclosure of CSR had no significant effect on the financial performance of the company.

Keywords: intellectual capital, corporate social responsibility disclosure, capital structure, debt equity ratio, return on assets

1. Preface

Company performance can be used to describe the financial condition of a company, so we can predict how well is their financial condition which reflects the performance in one period of time (Izati, 2014)). In this study, the financial performance is measured by the return on asset (ROA) ratio. ROA is used to measure the company’s effectivity on making profits by utilizing its assets.

For the last few years, based on ROA, financial performance of the basic and chemical company registered in Indonesia Stock Exchange are decrease. The average ROA of
basic and chemical companies in 2013 was 9.52 percent, 8.15 percent in 2014, 6.04 percent in 2015 and 6.02 percent in 2016. Those data show that the financial performance measured by ROA is decreasing between 2013 and 2016.

Based on the previous research, the performance of companies assessed with ROA can be influenced by intellectual capital, disclosure of corporate social responsibility and capital structure. Intellectual capital phenomena developed after the emergence of PSAK No. 19 in 2000 on intangible assets, although not explicitly stated as intellectual capital, but intellectual capital has received attention.

In these days, the company is required to pay attention to stakeholder role. Therefore, the company must be able to do a reconciliation between the company and the stakeholder by developing corporate social responsibility programs. In 2013, a regional website Kompas published a lot of conflict cases related to natural resource. There were 232 natural resource conflicts in 98 municipal districts in 22 provinces. Of those, 232 cases, 69 percent of it involving farmers, 69 percent with a corporation (private), 13 percent forest, 9 percent national park, 3 percent local government, 1 percent other agencies and the other 5 percent are not explained by Kompas.

To face the increasingly competitive environment, decision about the capital structure is essential to any business organization. In this study, debt equity ratio (DER) is used as financial ratio to analyze the capital structure. The ratio will show the risk factor faced by the investor. The higher the DER ratio, the higher the company’s financial risk. This situation will affect the company’s share price and share volume.

Based on another background study and research, this study will try to discuss the effect of intellectual capital, CSR disclosure and capital structure on financial performance. In this study, the sample is taken from the basic and chemical company list on Bursa Efek Indonesia (BEI) during the period of 2013–2016.

2. Literature Review and Hypotheses

2.1. Stakeholder theory

Stakeholder theory stated, all the stakeholders have the same right to get information regarding the company activities that could affect them [46]. Stakeholder theory is more concerned about the position of stakeholder rather than the shareholder, because according to the theory, stakeholder has more powerful position.
Stakeholder groups here include not only business actors and shareholders, but also workers/employees, customers, suppliers, creditors, governments, communities and the environment in all aspects of the company’s operations.

This theory also stated, the organization will choose to voluntarily reveal the information about performance environment, their social and intellectual, more than what they have to reveal, to meet the real expectation, or to be recognized by the stakeholder (Deegan, 2014 in Octavia et al., 2016).

2.2. Intellectual capital (IC)

According to Nurhayati (2017), intellectual capital is an intangible asset which has an important role in improving companies’ competitiveness and can also be effectively useful for increasing company profit. Generally, the researcher identified three main constructs from IC, human capital (HC), structural capital (SC) and costumer capital (CC) (Bontis et al., 2002 in Ulum et al., 2008).

This study used Value-added Intellectual Coefficient (VAIC\textsuperscript{T M}), developed by Pulic (1998), used by Ulum (2009), to measure the intellectual capital. This proxy was selected because the data needed is not difficult to find from various sources and company type. The measurement used in VAIC\textsuperscript{T M} method is calculated by the Value Added (VA) that consists of value-added capital employed (VACA), human capital (VAHU) and structural capital (STVA).

\[
\begin{align*}
    VA &= Output - Input \\
    VACA &= VA / CE \\
    VAHU &= VA / HC \\
    STVA &= (VA - HC) / VA \\
    VAIC\textsuperscript{T M} &= VACA + VAHU + STVA
\end{align*}
\]

Description:

1. VAIC\textsuperscript{T M} = Value-added Capital Coefficient
2. VA = Value Added
3. VACA = Value-added Capital Employed
4. VAHU = Value-added Human Capital
2.3. CSR disclosure

Corporate Social Responsibility (CSR) is a concept that organization, especially a company, (but not only the company) has a responsibility toward the stock and stakeholder. It such as consumer, employee, shareholder, community and environment in all operational aspects, including economic aspect, social and environment. CSR is a phenomena and strategy that company use to accommodate stakeholder’s needs and benefit.

This study used basic CSR disclosure with Global Reporting Initiative (GRI) standard, which it is the standard for revealing Corporate Social Responsibility in Indonesia. These days, the last version of the GRI is G4. This proxy is selected because it focused on standard disclosure on companies’ economic performance, social and environmental, that aims to improve quality and sustainability reporting (www.globalreporting.org). The researcher used the formula that was used by Bhernadha et al. (2017).

\[
\text{CSRDI}_j = \frac{\sum x_{ij}}{n_j} \times 100\%
\]

Description:
CSRDI$_j$: Corporate Social Responsibility Company Index

nj: The number of Corporate Social Responsibility (CSR) disclosure criteria for company j, nj ≤ 91.

Xij: 1 = If criteria is disclosed; 0 = If criteria is not disclosed.

2.4. Capital structure

According to Wardani and Dewi (2015), capital structure is an important issue for company sustainability for the reason that company activity and development has always
begun with it. The core of capital structure is to find the balance between benefits and the cost for the use of debt.

The capital structure is measured by debt to equity ratio (DER). This proxy is selected because according to George (1996) and Fahmi (2013), debt is one of the representative ratio in capital structure measurement. The researcher used the formula that was used by Fahmi (2013).

\[
DER = \frac{\text{Total Debt}}{\text{Total Equity}}
\]

2.5. Financial performance

Financial performance is a work performance in finance that is achieved by the company and stated on the company’s financial statement. Financial performance is used to determine the efficiency and effectiveness in managing the invested funds, so it can provide a maximum profit for the company, manager and investor, also to determine the companies’ development and the companies’ ability to maintain its position in a critical period of increasingly competitive rivalry.

ROA has been chosen as the proxy because that ratio can be used to measure company effectiveness financially by utilizing its assets. This proxy is chosen because it is the most important ratio compared to any other of its kind (Robert Ang, 1997, in Agrestya, 2012). The researcher used the formula that was used by Faradina (in Gayatri, 2016).

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

2.6. Research hypothesis


3. Research Methods

In this study, researcher used samples from a list of basic and chemical company in Bursa Efek Indonesia list from 2013 to 2016. This study choose basic and chemical
company as samples because they are one of the type of company referred to in the law as the company that deals with natural resources. Industries related to natural resources based on Corporate Performance on Environmental Program (PROPER) include: Agricultural Sector, Mining Sector, and Basic Industry and Chemical Sector.

The sampling technique used in this research is purposive sampling, where the way of taking the subject is not based on strata, random or area but based on the existence of certain purpose, for it is determined that some samples are based on certain criterion [46]. The criterion of sampling company in this research is shown in Table 1:

**Table 1: Details of obtaining sample research.**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>The basic companies and chemicals are listed for four consecutive years at BEI in 2013-2016.</td>
<td>63</td>
</tr>
<tr>
<td>Basic and chemical companies that do not publish their financial statements and annual reports as of December 31 on the BEI or company website during the period of observation.</td>
<td>(2)</td>
</tr>
<tr>
<td>Basic and chemical companies that do not present financial statements in rupiah currency and suffer losses during the period of observation.</td>
<td>(36)</td>
</tr>
<tr>
<td>Basic companies and chemicals that do not disclose Corporate Social Responsibility (CSR) in the annual report during the observation period.</td>
<td>(0)</td>
</tr>
<tr>
<td>Number of companies that qualified the criteria</td>
<td>25</td>
</tr>
<tr>
<td>Total sample research for four periods</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on the Table 1, it can be seen that the sample used in this study amounted to 100 corporate data. The sample was chosen because it has met the criteria determined in accordance with the needs of the research analysis.

4. Results and Discussion

4.1. Descriptive statistics analysis test

Descriptive analysis used to analyze data by way of describing or describing the data that has been collected. Descriptive statistics provide descriptions or descriptions of data viewed from the mean (mean), standard deviation, variance, maximum, minimum [17].
Table 2: Descriptive statistics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>100</td>
<td>1.26</td>
<td>15.52</td>
<td>3.0801</td>
<td>2.17942</td>
</tr>
<tr>
<td>CSR</td>
<td>100</td>
<td>0.08</td>
<td>0.86</td>
<td>0.3198</td>
<td>0.15272</td>
</tr>
<tr>
<td>DER</td>
<td>100</td>
<td>0.08</td>
<td>5.15</td>
<td>0.8679</td>
<td>0.99686</td>
</tr>
<tr>
<td>ROA</td>
<td>100</td>
<td>0.01</td>
<td>0.26</td>
<td>0.0744</td>
<td>0.05552</td>
</tr>
</tbody>
</table>

4.2. Multicollinearity test

Multicollinearity test aims to examine whether the regression model find the correlation between independent variables. A good regression model is when there is no correlation between independent variables. In order to detect if multicollinearity symptoms appear or not, variance inflation factor (VIF) and tolerance were used. The tolerance limit is 0.10 and VIF limits is 10. If the tolerance value > 0.10 and VIF < 10, it means there is no occurrence of multicollinearity.

Table 3: Statistical test results multicollinearity.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.060</td>
<td>0.013</td>
<td>4.523</td>
<td>0.000</td>
</tr>
<tr>
<td>IC</td>
<td>0.008</td>
<td>0.002</td>
<td>0.334</td>
<td>3.616</td>
<td>0.000</td>
</tr>
<tr>
<td>CSR</td>
<td>0.021</td>
<td>0.035</td>
<td>0.057</td>
<td>0.602</td>
<td>0.549</td>
</tr>
<tr>
<td>DER</td>
<td>~0.021</td>
<td>0.005</td>
<td>~0.384</td>
<td>~4.364</td>
<td>0.000</td>
</tr>
</tbody>
</table>

4.3. Heteroscedasticity test

Heteroscedasticity test aims to examine whether on regression model, there is dissimilarity variance happening on one residual observer to another. If the variance from one residual observer to another is steady, it is called by heteroscedasticity, but if not, it is called by heteroscedasticity. A good regression model is heteroscedasticity [17].

Heteroscedasticity test of this study with park test, done by regressing all independent variables with Ln residual squares (Ln e2). If there is a significant influence on
the residual $\ln$ value of squared ($\ln e^2$) then in the model there is a problem of heteroscedasticity or if the value of significance is above 0.05, it is free of heteroscedasticity. Therefore, the equations used to test heteroscedasticity by Park method are as follows [40]: $\ln \mu_2i = \alpha + \beta \ln X_i + \epsilon_i$.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>(-7.561)</td>
<td>(0.856)</td>
<td>(-8.836)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>LNIC</td>
<td>(0.678)</td>
<td>(0.479)</td>
<td>(0.149)</td>
<td>(1.417)</td>
</tr>
<tr>
<td>LNCSR</td>
<td>(0.475)</td>
<td>(0.434)</td>
<td>(0.116)</td>
<td>(1.096)</td>
</tr>
<tr>
<td>LNDDER</td>
<td>(-0.063)</td>
<td>(0.217)</td>
<td>(-0.030)</td>
<td>(-0.290)</td>
</tr>
</tbody>
</table>

### 4.4. Normality test
Normality test aims to determine the regression model, confounding variable or residual has a normal distribution. There are two ways to detect normal residual distribution; by analyzing the graph and by doing statistical analysis. This study used both of analysis which are graph analysis by observing normal probability plot and statistical analysis which is one-sample Kolmogrov by seeing the significance. If it is more than 0.05, it means the data distribution is normal [17].

### 4.5. Autocorrelation test
Autocorrelation test aims to test the correlation between observation data, where the emergence of one data is influenced by the previous one. The good regression model is regression without autocorrelation. The autocorrelation can be detected from the significant result above 0.05 from the run test [17].

### 4.6. Hypothesis test results
Hypotheses testing in this study is done with multiple regression analysis model. According to Ghozali (2016), multiple regression is used to determine the effect of multiple independent variable toward one dependent variable. In this study, the
**Figure 1:** Normal probability plot.

**Table 5:** Statistical results on sample Kolmogorov-Smirnov.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Normal Parameters</strong></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0.00000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.04600838</td>
</tr>
<tr>
<td><strong>Most Extreme Differences</strong></td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>0.070</td>
</tr>
<tr>
<td>Positive</td>
<td>0.070</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.058</td>
</tr>
<tr>
<td><strong>Komolgorov-Sminimalv</strong></td>
<td>0.070</td>
</tr>
<tr>
<td><strong>Asymp. Sig. (2-tailed)</strong></td>
<td>0.200</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

Hypotheses testing was done by the coefficient determination and did the significant individual parameter test (t-test statistic).
4.7. Coefficient of determination

The determination coefficient test in this research is used to see the effect of independent variable (intellectual capital, CSR disclosure and capital structure) to the dependent variable (financial performance of the company).

<table>
<thead>
<tr>
<th>Table 7: Coefficient determination test results.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Summary</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

The test results show that the adjusted $R^2$ is 0.292 or 29.2 percent. So, it can be said that 29.2 percent is caused by intellectual capital, CSR disclosure and capital structure (DER). While 70.8 percent performance of company keunangan is caused by other variables not examined in research such as good corporate governance, rate of growth of intellectual capital and intellectual capital disclosure.

4.8. Significant individual parameter test (t-test)

$t$-test is basically indicating how far the influence of one independent variable in order to explain the variation of the dependent variable with 0.05 or 5 percent significant level. If the value of probability $< 0.05$, the coefficient of the regression is significant and $H_0$ is accepted or conversely.
### Table 8: T-Test result.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.060</td>
<td>0.013</td>
<td>4.523</td>
<td>0.000</td>
</tr>
<tr>
<td>IC</td>
<td>0.008</td>
<td>0.002</td>
<td>0.334</td>
<td>3.616</td>
</tr>
<tr>
<td>CSR</td>
<td>0.021</td>
<td>0.035</td>
<td>0.057</td>
<td>0.602</td>
</tr>
<tr>
<td>DER</td>
<td>-0.021</td>
<td>0.005</td>
<td>-0.384</td>
<td>-4.364</td>
</tr>
</tbody>
</table>

### Table 9: Hypothesis testing results.

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypothesis</th>
<th>Hypothesis Testing Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>H1: Intellectual Capital Influence on Financial Performance</td>
<td>Accepted</td>
</tr>
<tr>
<td>3.</td>
<td>H3: Capital Structure affects Financial Performance</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

### 5. Conclusion

The purpose of this research is to know the influence of intellectual capital, CSR disclosure and capital structure to financial performance. Research sample is basic and chemical company listed in Indonesia Stock Exchange (BEI) during the period of 2013 until 2016. The sample used in this research amounted to 100 company data.

Based on the data collected and test results that have been done by using multiple linear regression test, and with the discussion in the previous section can be drawn the following conclusions:

1. The result of multiple linear regression test shows that intellectual capital has positive effect to companies’ financial performance proxied by ROA. Similar results were found in a study conducted by Negari et al. (2017) and Arifin (2016), Faradina and gayatri (2016) and Ulum (2009).

2. Multiple linear regression test results show that CSR disclosure does not affect the companies’ financial performance proxied by ROA. Similar results were found in studies conducted by Mustafa and Nur (2014), Yaparto et al. (2013) and Wijayanti et al. (2011). Multiple linear regression test results show that CRS disclosure does not affect the companies’ financial performance proxied by ROA. Similar result
was found in studies conducted by Mustafa and Nur (2014), Yaparto et al. (2013) and Wijayanti et al. (2011).

References

tual Capital, Corporate Social Responsibility dan Good Corporate Governance Terhadap
Kinerja Keuangan (Studi Kasus Pada Perusahaan BUMN yang Terdaftar di BEI Pada
Tahun 2011-2013).” Jurnal Akuntansi Universitas Pendidikan Ganesha, Vol. 3, No. 1,
Tahun 2015.

Kinerja Keuangan Pada Perusahaan Manufaktur yang Terdaftar Di BEI.” Jurnal


Capital, Corporate Social Responsibility, Dan Good Corporate Governance Terhadap
Kinerja Perusahaan (Studi Kasus Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa
Efek Indonesia tahun 2011-2015).” E-Journal S1 Akuntansi Pendidikan Ganesha,
Volume 7, No. 1, Tahun 2017.

Sector Companies Listed at Jakarta Stock Exchange in Period 2008-2012.” Jurnal

Sector Companies Listed at Indonesia Stock Exchange in Periode 2008-2012.” Journal
of Wacana, Vo. 20, No. 1, 2017.

Social Responsibility Terhadap Kinerja Keuangan Perusahaan (Studi Pada Perusahaan
Winner of Sustainability Reporting Award (SRA) 2015 yang Terdaftar di BEI Periode

2004.

[9] Cand rakirana, Rosita. “Studi Perbandingan Pengaturan Tentang Corporate Social
Responsibility Di Beberapa Negara dalam Upaya Perwujudan Prinsip Good Corporate


