The Effect of Working Capital, Liquidity and Solvency on Profitability at PT Nippon Indosari Corpindo, Tbk

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ABSTRACT

The main attraction for owners of company shareholders lies in the profitability ratio that shows the results of the management of the company's management of the funds invested. This study aims to determine: The Effect of Working Capital, Liquidity and Solvency on the Profitability of PT. Nippon Indosari Corpindo Tbk, both partially and simultaneously. Descriptive quantitative research methods, the data used are secondary data in the form of financial statements of PT. Nippon Indosari Corpindo Tbk, for a period of 9 years from 2010 - 2018 obtained through the IDX (Indonesia Stock Exchange). The analytical method used is the classic assumption test, multiple linear regression analysis, coefficient of determination and hypothesis testing. Based on the analysis results obtained the coefficient of determination (R2) of 0.928 or equal to 92.8%, which means that the contribution made by working capital, liquidity and solvency to profitability reaches 92.8.3% the remaining 7.2% is influenced by other variables which is not researched. Based on the t test partially working capital on profitability there is an effect where tcount -5.847 > t table 2.575 and significance value 0.02 <0.05 and partially liquidity on profitability has no effect where tcount 1.846 <t table 2.575 and significance value 0.124> 0.05 and partially solvency to profitability there is the influence of tcount -3.386 > ttable 2.575 and significance value 0.02 <0.05 based on the f test simultaneously working capital, liquidity and solvency affect the profitability where Fcount 21.477 > Ftable 5.41 with a significant value of 0.003 <0.05

Keywords: Working capital; liquidity; solvency; profitability

INTRODUCTION

Investment activities in Indonesia in recent years have tended to show an increase. This shows that companies in Indonesia are still attractive to investors. One of the main measurement tools for evaluating a company's financial performance in investment activities that are commonly used by investors is profitability ratios (Brigham & Houston, 2013; Horne, J.C. and Wachowicz, 2007; Kasmir, 2014b; Tandelilin, 2010). The main attraction for owners of company shareholders lies in the profitability ratio that shows the results of the management of the company's management of the funds invested (Daraba et al., 2018; Mirdawati et al., 2018). The profitability ratio or profit ratio is closely related to the company's ability and the effectiveness of the company's operations in generating profits (Dowd, 1999; Suririsno, 2013; Wong, 2006).

In managing assets, more attention is needed to manage working capital in a company to be more efficient. This is because a significant portion of assets is the proportion of working capital. Companies really need working capital to meet operational needs (Indriyani, 2017;
Mulyanti, 2016; Rudianto, 2012). The readiness of a company to operate is strongly influenced by working capital. Companies that do not think of working capital well can cause losses to the company (Atmaja, 2008; Esra, 2002; Trisnawati, Rosa, & Putri, 2013). An adequate net working capital allows a company to carry out its activities. Excessive net working capital will cause unproductive funds and will harm the company because these funds are not used effectively for operational activities. Conversely, a lack of working capital will cause a hindrance in the company's operations so that expected profits will be difficult to achieve. In addition, the company's survival is also influenced by many things, including the company's liquidity itself. Liquidity refers to the company's ability to meet its short-term obligations. The importance of liquidity can be seen by considering the impact that comes from the company's inability to meet its short-term obligations. Lack of liquidity prevents companies from making a profit. To measure the company's ability to meet its short-term obligations, a liquidity ratio is used. According to (Kasmir, 2014a) states that the liquidity ratio is a ratio that illustrates the company's ability to meet short-term obligations (debt).

This ratio is used to describe how liquid a company is and the company's ability to settle short-term liabilities using current assets. In other words, this ratio is used to measure a company's ability to pay obligations that are due soon. The importance of liquidity can be seen by considering the impact of the company's inability to meet its short-term obligations. Lack of liquidity prevents companies from profiting from discounts or opportunities for profit, it also means limiting opportunities and management actions.

In carrying out the company's operations require funding sources (Brigham & Houston, 2007; Fahmi, 2014; Halim, 2012; Harahap, 2009). This funding source can be obtained from the company's internal and external companies. Basically the funds managed by the company must be managed properly, the proportion between sources of funds from internal companies with sources of funds from external companies must be considered because it can affect the size of profits for the company, a measurement tool to analyze the proportion between the company's internal funding sources with external funding sources can use solvency ratios. The solvency of a company shows the company's ability to meet all financial obligations if the company is currently liquidated (Riyanto, 2008). Understanding Solvency is intended as the company's ability to repay all of its debts (both short-term and long-term). Meanwhile according to (Munawir, 2010). Solvency is the company's ability to meet its financial obligations if the company is liquidated, both short-term and long-term obligations (Dewi Fitriana, 2016; Faisal, Samben, & Pattisahusiwa, 2018; Junita & Khairani, 2011).

**METHOD**

The population used by researchers in this study is the Financial Statements in the form of a Balance Sheet and Income Statement at PT. Nippon Indosari Corporindo Tbk. While the sample in this study is the Financial Statements of PT. Nippon Indosari Corporindo Tbk from 2010 to 2018. The analytical method used in this research is to use statistical analysis through the classical assumption test approach, multiple linear regression test, coefficient of determination test, partial t test and simultaneous F test and then the regression results will be analyzed.
RESULT AND DISCUSSION

Profitability ratios are ratios that describe the ability of a company to make a profit through all the capabilities and available resources. In this research the writer uses Return of Asset as profitability ratio. Return of Assets is a measure of a company's ability to generate net income based on certain asset levels.

Classic assumption test

Table 1
Data Normality Test

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Predicted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>9</td>
</tr>
<tr>
<td>Normal Parameters(^{a,b})</td>
<td>Mean ,.1322433</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.06301392</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute ,.145</td>
</tr>
<tr>
<td></td>
<td>Positive ,.145</td>
</tr>
<tr>
<td></td>
<td>Negative ,-.140</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>Asymp. Sig. (2-tailed) ,.200(^{c,d})</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

In the diatras data output, it can be seen that the normality test results show a significantly greater level than \(\alpha\) (0.05), which is 0.200> 0.05, which means that the data are normally distributed. And from the curve analysis it can be seen that the data is spread around the diagram and follows the regression model so that it can be concluded that the data processed is normally distributed data so that the normality test is met.
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**Data Normality Test**

**Table 2. Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Zero-order</th>
<th>Partial</th>
<th>Part</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>3.227</td>
<td>6.40</td>
<td>5.912</td>
<td>.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1</td>
<td>-1.428E-7</td>
<td>0.00</td>
<td>-1.188</td>
<td>-5.874</td>
<td>.002</td>
<td>-.806</td>
<td>-.935</td>
<td>-.705</td>
<td>3.85</td>
</tr>
<tr>
<td>X2</td>
<td>.028</td>
<td>0.15</td>
<td>.377</td>
<td>1.846</td>
<td>.124</td>
<td>-.433</td>
<td>.037</td>
<td>.222</td>
<td>3.40</td>
</tr>
<tr>
<td>X3</td>
<td>-2.00</td>
<td>0.01</td>
<td>-4.423</td>
<td>-3.308</td>
<td>.020</td>
<td>.357</td>
<td>-.033</td>
<td>-.404</td>
<td>.912</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

From the results of the output data it is found that all VIF values <10 means that multicollinearity does not occur and concludes that the multicollinearity test is met.

![Scatterplot](image)

**Figure 2**

**Heteroscedasticity Test**

Figure 2 can be seen that there is no heteroscedasticity because there are no clear patterns and scatter points above and below zero on the Y axis so that it can be concluded that heteroscedasticity test is fulfilled.
Table 3
Autocorrelation Test

<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>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.953a</td>
<td>.928</td>
<td>.885</td>
<td>.02230433</td>
<td>.078</td>
<td>21.47</td>
<td>3</td>
<td>5</td>
<td>.003</td>
<td>1.849</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X3, X1, X2
b. Dependent Variable: Y

Table 3 obtained the value of Watson durbin (DW count) of 1.849. Based on criteria that have been determined DW count is between -2 and 2 ie -2 ≤ 1,849 ≤ 2 then this means there is no autocorrelation, so it can be concluded the autocorrelation test is fulfilled.

Simple Linear Regression Analysis

The equation of the multiple linear regression model can be seen in the following table 4.

Table 4
Multiple Linear Regression Analysis

Based on the table above, the t-count is -5.847 while the table is 2.575 in the t-distribution table. Where t-count < 0.05 so that the conclusion can be drawn Ho is rejected and Ha is accepted so that this hypothesis states that working capital individually (partial) has a positive and significant effect on ROA.

T value is 1.846 while the table is 2.575 in the distribution table t. Where t-count 1.846 < t table 2.447 and the significance value 0.124 > 0.05 so that the conclusions can be drawn HO is accepted and Ha is rejected so this hypothesis states that the Current Ratio individually (partial) has no positive effect and is not significant on ROA.

The t-count is -3.368 while the table is 2.575 in the distribution t-table. Where t-count -3.368 > t table 2.575 and significance value 0.02 > 0.05 so the conclusion is HO is accepted and Ha is rejected so this hypothesis states that Debt to Total Assets individually (partial) has positive and not significant effect on ROA.
Determination Coefficient Test

The coefficient of determination is used to determine the strength of the influence of independent variables on the dependent variable. It can be seen from the amount of the coefficient of determination (R2) that is different between zero and one. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable. From the results of data processing, the following results are obtained:

Table 5
The Result of the Coefficient Analysis is Terminated

<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>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.942a</td>
<td>.926</td>
<td>.885</td>
<td>.0220493</td>
<td>.926</td>
<td>21.477</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X3, X1, X2
b. Dependent Variable: Y

The output results in table 5 show that the Determination Coefficient (R2) is 0.926 or 92.6% which means that ROA is influenced by the three variables of CR and DAR Working Capital. And the remaining 7.4% is influenced by other factors outside this study. This is because the indicators for evaluating the soundness of a company not only consist of the two variables X (working capital, current ratio and debt to total assets ratio) but there are also other indicators.

F test

F test (simultaneous test) is carried out to see together the significant influence of the independent variable on the variable.

Table 6
F test

<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>3</td>
<td>.011</td>
<td>21.477</td>
<td>.003b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td>.034</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X3, X1, X2

Based on the table above it can be seen that the results of the F Test show the F_{count} value of 21.477 while the F_{table} of 5.41 at (α) = 0.05 and df1 = 3, df2 = 9 - 4 = 5 by looking at the
distribution $F_{table}$. Means the $F_{value}$ $21,477 > F_{table}$ 5.41 with a significant value of 0.003 < 0.05 then $H_0$ is rejected and $H_a$ is accepted. This shows that there is a significant influence of Working Capital, Current Ratio (CR) and Debt to Total Assets (DAR) on Return On Assets (ROA) simultaneously (simultaneously) on the company PT. Nippon Indosari Corpindo Tbk period 2010 - 2018.

**CONCLUSION**

Based on the results of the study found that working capital has a positive effect on ROA. It can be seen that the $t$ value is -5.847 while the table is 2.575 in the distribution $t_{table}$. Current ratio does not have a positive effect on ROA. It can be seen that the value of $t$ is 1.846 while the table is 2.575 in the distribution $t_{table}$ towards ROA. Debt to Total Assets has a positive effect on ROA. It can be seen that the $t_{count}$ is -3.368 while the $t_{table}$ is 2.575 in the distribution $t_{table}$ towards ROA. There is a significant influence of working capital, Current Ratio (CR) and Debt to Total Assets (DAR) on Return On Assets (ROA) together (simultaneously) at the company PT. Nippon Indosari Corpindo Tbk 2010 - 2018 period. Can be seen from the value of $F_{count}$ $21.477 > F_{table}$ 5.41.

**REFERENCES**


