IMPACT OF AGGRESSIVE WORKING CAPITAL POLICY ON FIRMS’ PROFITABILITY: A CASE OF MANUFACTURING COMPANIES LISTED INDIANA STOCK EXCHANGE

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Abstract

The working capital management plays an important role for success or failure of firm in business. This study aimed to examine the effect of aggressive working capital policies within the company. By focusing the company's policy on the policy of aggressive working capital financing is measured by the variable Aggressive Financing Policy, Leverage and Size, the company's profitability as measured by return on assets and net operating income profitability. Using 102 data from manufacturing companies in Indonesia Stock Exchange during the period 2009-2014 with a certain pre-determined criteria. For regard this research adopted ordinary least square regression method for research approach to test a research hypothesis. The result of study showed that there is significant positive relationship between aggressive financing policy on return on assets, and relation between financing policy on net operating profitability positive but no significant. This indicates that the more aggressive company in the finding it will greater benefit.

Keywords: Aggressive working capital Policy, leverage, size, Return on Assets, Net Operating Profit

I. Introduction

The working capital management is important to be considered by all companies because the company should to manage their current assets and current liabilities properly. Working capital management will be affecting the liquidity and profitability, but there is always has a trade-off between liquidity and profitability. According to (Sawir, 2005) targets to be achieved from working capital management to maximize value, minimize the cost of capital, and supervision of the flow of funds in current assets. Therefore, management should really know how the company's condition and what targets to be achieved by the company, so that the management do not make mistakes in managing of working capital and the company is not in a situation that is not favorable.

Working capital is the capital that used by company as a funding their daily operations. Working capital can be obtained from various sources in accordance with the company policy. The Working capital financing policy is a strategy that used by companies to fulfill working capital needs with various alternative of sources of funds short term or long term. According to : (Riyanto, 2008) the working capital financing is constituted of debt financing used by companies with indicate the amount of short-term debt toward all loans which are company owned to increase profitability.

There are three types of working capital financing policy, firstly, aggressive policies of the working capital financing, where is the working capital is fulfilled with all of short-term debt. furthermore, moderate policies, where is the working capital fulfilled to 50% with short-term debt and 50% with long-term debt. and the lastly, conservative
policies, where is the all of the working capital will be fulfilled with long-term debt. (Weston & Copeland, 2008).

The management is faced with a difficult decision, which in the same time, the management must determine policies and decisions on the conduct of funding the working capital. Considerations managers in making financial decisions depend on the attitude or preference of management to profit (return) and risk (risk). Working capital fulfilled with short-term loans has a low level of liquidity, so, the risk of failure to fulfill the responsibility on due date is high. From the third of working capital financing policy, this research will focus on aggressive funding that gives the maximum profit and high risk. According to (Brigham & Houston, 2010) manager aggressive are likely to use short-term debt to increase rate of profit.

Some other factors that affect the company's ability to generate profits that can be included in this study refers to research carried out by (Vahid, 2012) are firm size and debt ratio. Size company will be affecting the size of the investment or business development, so expected the company's profitability will be increase too. Furthermore, the debt ratio indicates the risk level of companies, if the risk of company more and more higher, the expected return from the company is higher too as a reward to take a high risk.

Recognizing that manufacturing companies that has a huge contributed for the state budget and the differences in the results of research on the funding policy of the working capital aggressive affecting the profitability in several countries, this study tries to examine the effect of working capital policy aggressively on profitability in manufacture companies listed in Indonesia Stock Exchange Period 2009-2014. The problem statement to be analyzed in this study is “does aggressive working capital policy affects profitability of manufacturing companies listed in Indonesia Stock Exchange”. The main objectives for these study are:(1) To draw conclusion about relationship of aggressive working capital management policy and profitability (Return on Assets) of Indonesian manufacturing companies. (2) To draw conclusion about relationship of aggressive working capital management policy and profitability (Net Operating Profitability) of Indonesian manufacturing companies

II. LITERATURE REVIEW

Working capital financing policies

Working capital financing policies are policies related to determining the type of source of funds, short or long duration, and how much each source of funds that will be used to fund working capital. The considerations in determining policy and the combination of short-term funding to finance long-term investments in current assets is the risk and cost of financing (Weston & Copeland, 2008), (Horne & Wachowicz, 2009) Short-term funding is funding with maturity less than one year, and Long-term funding is the funding with maturity exceeding one year.

Consideration discretion to determine the use of short-term funding or long term are: 1) the shorter the life of the debt means that the higher the risk of having to immediately pay interest and principal, and 2) financing in the form of interest charges. The total interest cost of funding is determined by the interest rate and term funding. The higher the interest rate and the longer the life of the debt means higher funding costs.

To finance investments in current assets, can be a source of short-term funding and long-term. There are differences in the characteristics of short-term funding sources and long-term. As for the characteristics of short-term funding are: 1) short-term funding has a lifespan is relatively short so as to have a high risk of having to immediately pay interest and principal, and 2) short-term funding normally ask the maturity of funding in the short term, so the total cost of funding relatively lower. While the characteristics of long-term
funding are: 1) funding has aged relatively long so as to have a lower risk for principal repayments made within a period of relatively long, and 2) long-term funding sometimes ask interest rates relatively high and certainly in the run a long time, so the total cost of funding is relatively higher.

By paying attention to these characteristics, reflecting the trade-off between risk and financing costs in determining the combination of short-term funding and long-term, namely: 1) if the use of short-term funding resulted in a high risk but low funding costs, and 2) if the use-term funding long lead to low risk but high funding costs. In connection with the use of short-term financing or Long term, there are three types of funding policy, namely: 1) hedging funding policy, 2) conservative policy, and a policy of aggressive funding. (Weston & Copeland, 2008); (Riyanto, 2008); (Brealey & Myers, 2003)) ; and (Horne & Wachowicz, 2009).

**Aggressive Financing Policies**

Aggressive financing policy is a method of funding, with funding that have a lifespan of funding is relatively shorter than the life of the investment to reduce the cost of funding (Horne & Wachowicz, 2009) policy funding (financing) aggressive use of higher current liabilities and long term liabilities as well as lower capital, where the aggressive financing policy that can improve profitability. Aggressive Financing Policy shown by a comparison between the total current liabilities with total assets greater than 50 percent. Formulations for calculating Aggressive Financing Policy of a company are as follows:

\[
\text{Aggressive Financing Policy} = \frac{\text{Total current liabilities}}{\text{Total Assets}}
\]

**Profitability**

Profitability is the company's ability to generate earnings in certain periods, either in the form of operating profit and net income. Profit often be one measure of corporate performance. Wherein when the company has a high profit means better performance and vice versa. Profitability is a tool used to analyze the performance of management, profitability will describe the position of corporate profits. The investors in the capital market very concerned about the company's ability to generate and increase profits, it is an attraction for investors in buying and selling shares, therefore the management should be able to meet the targets that have been set. The company’s profitability will be measured by using a variable return on Assets and Net operating Income. Return On Assets is the ratio between Earning After taxes by total assets, while net operating Profitability (NOP) is a comparison between before Earning interest and taxes to total assets.

**Research Accomplished**

Several studies have been conducted to test the aggressive working capital management policy to profitability. (Afza & Nazir, 2007) examined the relationship policy of aggressive / conservative in working capital for the 17 industry groups on the Karachi Stock Exchange the period 1998-2003 and found that there is a significant correlation between the negative and the level of profitability and the degree of aggressiveness of working capital management. A description of some previous research can be seen in the following table 1.
Table 1. Previous Research

<table>
<thead>
<tr>
<th>Authors (Year)</th>
<th>Title</th>
<th>Sample</th>
<th>Method</th>
<th>Findings</th>
</tr>
</thead>
</table>
- no significant relationship between AIP with ROA and ROE  
- no significant relationship between AFP with ROA and no significant relationship AFP with ROE |
| Mwangi (2014) | Effects of Working Capital Management on Performance of Non-Financial Companies Listed In NSE, Kenya | Nairobi Securities Exchange hand books for the period 2006-2012 | Regression | Conservative investing policy was found to affect performance positively and aggressive financing policy had a significant positive effect on performance |
| Vahid (2012)  | The impact of working capital management policy on Firm’s profitability and Value: Evident from Iranian Companies | 28 company listed on Tehran Stock Exchange for a period of 5 years from 2005 to 2009 | Ordinary least square regression | Significant negative relationship between working capital policies on profitability of the firms |

Conceptual Framework
The Influence Of An Aggressive Working Capital Policy To Profitability

Aggressive working capital policy using the level of debt as a source of funding is higher. Companies are more aggressive in terms of the management of current liabilities if they concentrate on the use of current liabilities even put them at risk of liquidity. It is based because the company will use short-term funding sources to meet the needs of companies that are seasonally variable and uncertain. This strategy risks, because it must maintain a low net working capital. However, the profit obtained in high quantities because the total cost is low (Riyanto, 2008). This will affect the profitability of companies due to the increasing number of existing debt in the company then the company will bear the debt
burden is too high. In some studies conducted leverage and size variables have a significant influence on the profitability of the company. So it can be concluded that the variable Aggressive Financing Policy affect the profitability of the company.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Aggressive working capital policy</td>
<td>- Net operating profit</td>
</tr>
<tr>
<td>- Leverage</td>
<td>- Return on assets</td>
</tr>
<tr>
<td>- Size</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Conceptual framework

**Hypothesis**: (1) Policy aggressive working capital has a positive effect toward the Return on Assets. (2) Policy aggressive working capital has a positive effect on Net Operating Profitability.

### III. Research Method

#### Research Design

This study uses a quantitative approach by collecting secondary data from each company in the Stock Exchange, where the data acquired will be collected and processed into the input to provide value for the study variables. By using existing statistical tools to process secondary data available, is expected to be used as a tool to seek the conclusion of the hypothesis formulated. The scope of this study is to prove the hypothesis formulated in this research is to see the impact of the aggressive policy of working capital on profitability. The company's profitability from the company's ability to get a net profit (Return on Assets) and operating profit (Net Operating Profitability).

#### Population and Sample, Sampling Techniques

The population of this research is all manufacturing companies with the period from 2009 to 2014. The sample period used purposive sampling with criteria or considerations that are used in the selection of the sample is as follows: (1) It is a company belonging to the manufacturing sector. (2) During the period of observation 2009-2014, active share traded on the Indonesia Stock Exchange. (3) Has the financial statements consisting of the balance sheet and profit and loss. (4) Is a company that has a policy of aggressive round of funding working capital, working capital financing policy with good debt versus total number asset of companies greater than 50 percent. Based on these criteria was obtained by 20 companies with a total of 102 samples of research data.

#### Variables Description

This study used the aggressive working capital policy utilize higher current liabilities and less long term debt, and total current liabilities/total assets > 50%. The firms are more aggressive in terms of current liabilities management policy if they are concentration on the use of more current liabilities. Debt ratio and firm size will also used as variables control.
Table 2. Measurement of variables and Abbreviation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>Net Operating Profitability (NOP)</td>
<td>Earning Before interest and Taxes/Total Assets</td>
</tr>
<tr>
<td>Return on Asset (ROA)</td>
<td>Net Earning After Taxes/Book Value of Assets</td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>Aggressive Working Capital Policy (WCA)</td>
<td>Total Current Liabilities/Total Assets</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Financial Debt Ratio (DR)</td>
<td>Total Financial Debt/Total assets</td>
</tr>
<tr>
<td>Size of Firm (LOS)</td>
<td>Natural Logarithm of sales</td>
</tr>
</tbody>
</table>

IV. Result and Discussion

ROA, and NOP has been estimate for 102 data firm manufactures for the period 2009-2014 and result are reported in Table 3:

Table 3: Regression Analysis of Performance Measures and Aggressive Working Capital Policy

<table>
<thead>
<tr>
<th>Variable</th>
<th>ROA</th>
<th>NOP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>t-statistic</td>
<td>prob</td>
<td>( \beta )</td>
<td>t-statistic</td>
</tr>
<tr>
<td>C</td>
<td>-0.098</td>
<td>-1.773</td>
<td>0.442</td>
<td>-0.306</td>
<td>-1.895</td>
</tr>
<tr>
<td>WCA</td>
<td>0.346</td>
<td>2.929</td>
<td>0.004</td>
<td>0.233</td>
<td>1.554</td>
</tr>
<tr>
<td>DR</td>
<td>-0.452</td>
<td>-4.205</td>
<td>0.000</td>
<td>-0.330</td>
<td>-2.413</td>
</tr>
<tr>
<td>LOS</td>
<td>0.018</td>
<td>2.439</td>
<td>0.017</td>
<td>0.034</td>
<td>0.343</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.242</td>
<td>0.213</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.219</td>
<td>0.189</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>10.435</td>
<td>8.848</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob (F-statistic)</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat.</td>
<td>1.798</td>
<td>1.877</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test results F Statistics Model 1

From the research data will show the number that can be used a basis for determining whether or not sudatu fit the model used in the study. Using a level of \( \alpha = 5\% \), it can be concluded that the model first used in this study are already Fit. (Prob F-statistic = 0.000 \( < \alpha = 5\% \))

Test results F Statistics Model 2

From the research data for model 2 will show the number that can be used a basis for determining whether or not the model fir to used in the study. Using a level of \( \alpha = 5\% \), it can be concluded that the two models used in this study are already Fit. (Probability F-statistic = 0.000 \( < \alpha = 5\% \))

T Test Results Statistics Model 1

From the results of regression that do, it can be seen that the numbers probability and t-statistic of each variable (aggressive working capital, leverage, and size,) will be used as a basis in determining whether the variables used can have a significant influence and what effect on the dependent variable that there is Return on Assets. From the results obtained, the equation is obtained:

\[
Y_1, (\text{ROA}) = -0.098 + 0.0346WCA
\]

Probabilities of values in each variable, it can be concluded that the three variables used are all significant in influencing ROA. From these results it can be stated that:

H1 supported, stating that the Aggressive Working Capital Policy has a significant influence toward ROA with a significant level below \( \alpha = 5\% \) (0.004 <0.05). This makes
the first hypothesis in this study supported and in accordance with the theory of saying that the company will have higher profits when using an aggressive approach because the cost of debt or the total cost is low.

**Statistics T Test Results Model 2**

From the results of regression that do, it can be seen that the numbers prob and t-statistic of each variable (aggressive financing policy, leverage, and size,) will be used as a basis in determining whether the variables used can have a significant influence and what effect on the dependent variable that exists is Net operating profitability (NOP). From the results obtained, the equation is obtained:

\[ Y_2, (NOP) = -0.306 + 0.233WCA \]

Probabilities of values in each variable, it can be concluded that the three variables used the Aggressive Working Capital Policy did not significantly affect NOP, while variable leverage and size has a significant effect in influencing NOP. From these results it can be stated that H2 is not supported, stating that the WCA influence significantly the NOP with a significant level above \( \alpha = 5\% (0123 > 0.05) \). This makes the second hypothesis in this study are not accepted.

**Discussion**

In this study used two models to test each of the variables used to dependent variable. There are two hypotheses formulated in this study. The first hypothesis to conclude that the variable aggressive working capital measured by aggressive financing policy has a positive and significant effect toward ROA. This makes the first hypothesis in this study supported and in accordance with the theory of (Riyanto, 2008) which says that the company will have higher profits when using an aggressive approach because the cost of debt or the total cost is low. The results are consistent with research of (Mwangi, 2014) which states that the aggressive financing policy had a significant positive effect on performance, but not in accordance with the research (Amiri, 2014) who found no significant relationship between the Aggressive financing policy with Return On Assets.

The first control variables used in this study is variable Leverage. From the results obtained it was concluded that the variable leverage effect on Profitability companies. Actually Leverage variable is used to see how much a company uses debt to fund the company both in its operations or activities of the investment. And the results found by the results of the regression are variables Leverage significant. The debt ratio can be interpreted as companies earn their working capital by taking a policy of using debt provided by lenders that will impact on the profitability of the company. In this study the results obtained it can be concluded that the leverage ratio and significant negative effect on profitability (ROA) company. The second control variables used in this study is variable Size. From the results obtained it was concluded that the effect the variable Size on Profitability (ROA) company. Size variable is used to see if the size of the company measured by the large number of existing sales, have an influence for the company in profit. Because the greater sales of the company, the activities of these companies will be greater so as to make profit earned by the company is also getting bigger. And the regression results found that the variables Size and significant effect had a positive influence on profitability (ROA)

The second hypothesis concluded that the variable aggressive working capital measured by aggressive financing policy does not significantly influence profitability (NOP) of the company. This makes the second hypothesis in this study are not supported. This can occur because the operating profit does not include the cost of debt or a lower total cost when using an aggressive policy of working capital. The first control variables
used in this study is variable Leverage. From the results obtained it was concluded that the variable leverage effect on Profitability companies.

Actually Leverage variable is used to see how much a company uses debt to fund the company both in its operations or activities of the investment. And the results found by the results of the regression are variables Leverage significant. The debt ratio can be interpreted as companies earn their working capital by taking a policy of using debt provided by lenders that will impact on the profitability of the company (Riyanto, 2008). Variable of company size is used to see if the size of the company measured by the large number of existing sales, have an influence for the benefit of companies in operation and the results found by the results of this regression is the Size variable influence significantly and positively.

V. Conclusion

Based on the results of the analysis carried out in the previous chapter, then from this study can be summarized as following: (1) Variable of aggressive working capital policy has a significant influence and a positive effect on the profitability of the company which is denoted by using variable Return On Assets ROA). This is an indication that companies are using aggressive working capital financing policy will have a strong profit due to the cost burden of debt is also low. (2) Variable of aggressive working capital Policy does not have a significant impact and a positive effect on the profitability of the company which is denoted by using a variable net operating profitability (NOP). This is an indication that companies are using aggressive working capital financing policy does not have a significant effect on the ability to generate operating profits. This can occur because the operating profit does not include the interest factor. (3) Variable of Leverage has a significant influence and a negative impact on profitability (ROA and NOP) of the company. This is an indication that the company should be careful to use sources of funding derived from debt, because when the load the greater the cost of debt, the company will also pay greater interest to finance. (4) Variable of company size has a significant influence and a positive effect on profitability (ROA and NOP). This indicates that companies with a large number of sales will be able to generate huge profits.

References


