Analysis of Factors Affecting the Working Capital

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Abstract—The aim of research is to determine the factors that affect the company's working capital. The research was conducted at PT. Bumi Sarana Utama Foundation Kalla Group, Pare-Pare, South Sulawesi, Indonesia. Sources of data were in the form of the company's financial report in the last 5 years (2011-2015). Data were collected through observation, interviews, and documentation. Analysis of data used multiple regression analysis. The results showed that there are three factors that affected working capital simultaneously. They are cash conversion cycle, total assets, and the rate of sales growth. Out of these three variables, only the sales growth rate has no significant effect on the working capital.

Keywords: cycle changes in cash; total assets; sales growth rate; working capital

I. INTRODUCTION

The economic condition in Indonesia is growing according to the company's growth. Basically the fund or the capital of the company used to finance the exploitation of the company and to finance investment conceptually. Working capital management is closely related to the liquidity and profitability of a company. The company's asset management facilitates operations and prevents operational losses and failures [1].

According Kieschnick et al., there are some factors that affect the working capital which are a type of business, size of company, the company's sales growth forecasts, travel or activity managers, the company's executive compensation and results for the CEO with the owner.[3]

Increasing working capital will decrease the level of profitability of the company, while the use of lower working capital which will affect the company's operations. It is a condition of trade-off between profitability and risk of loss from operations of the company [4], [5].

Liquidity management for asset is very influential on the success of the company. The company's liquidity rating is based on the cash conversion cycle (CCC). This cycle examines the time ranges between cash payments in the manufacturing process and the payment of customer receivables. The time span or CCC differs from industry to industry depending on performance as well [6].

Total assets is the company wealth indicators with measured by units of money. The types of assets are grouped by their convenience converted into units of cash. Various ways companies to increase the total assets is to produce their own or build it. There are also assets acquired through purchases or donations from other parties.

PT. Bumi Sarana Utama is one of the companies of Kalla Group is engaged in trading of bulk asphalt. In the sales process, the company always apply the credit sales in their activities. The consequence is a very slow capital turnover. This requires a reliable management of capital management, especially in the operation of the company's working capital.

Working capital of PT. Bumi Sarana Utama Foundation Kalla Group, Pare-Pare, South Sulawesi, in general can be seen in current assets and current liabilities of the company. In 2013, the company had a deficit of working capital. This has an impact on the company's overall activity. During 2014 and 2015, the company's net working capital showed fluctuated changes. Fluctuations in net working capital were generally caused by changes in a company's current debt. This indicates that in the second year, the company did purchase credit to the supplier although the company has the ability to make cash purchases. The current assets of the company in general experienced a significant improvement.

Thus, the goal of working capital management is to manage each post in current assets and current debts. Therefore, the number of the desired net working capital retained and must be managed effectively and efficiently in order to maintain the company's liquidity. The contribution of each of the posts needs to be known. To determine the amount of funds allocated to each post in current assets and current liabilities are highly dependent on the factors that influence it.

Based on these descriptions, this research was conducted to determine the factors that affect the working capital at PT. Bumi Sarana Utama Foundation Kalla Group Pare-Pare in South Sulawesi, Indonesia.

II. RESEARCH METHOD

A. Research variable

The independent variables consist of three variables: Cash Conversion Cycle (X1), the total assets (X2), and the rate of sales growth (X3), the dependent variable is working capital (Y).
B. Data collection

Data were collected through observation, interview and documentation. Observations made to the financial statements of the last 5 years issued by companies.

C. Data analysis

Analysis of data used multiple linear regression. This analysis is to determine the direction of the relationship between the independent variables (X1, X2, X3) with the dependent variable (Y), using SPSS computer software program. This analysis predicts the value of the dependent variable on the increase or decrease. Multiple linear regression equation as follows:

\[ Y' = a + b_1X_1 + b_2X_2 + b_3X_3 \]

\[ X_1 = \text{Cash Conversion Cycle} \]
\[ X_2 = \text{the total assets} \]
\[ X_3 = \text{rate of sales growth} \]

III. RESULTS AND DISCUSSION

Based on the data obtained, the calculation of the regression analysis as shown in Table 1.

**TABLE I. SUMMARY OF RESULTS OF MULTIPLE REGRESSION ANALYSIS**

| Model          | Unstandardized Coefficients | Standardized Coefficients | t   | Sig.  |
|----------------|-----------------------------|----------------------------|-----|-------|
| (Constant)     |                             |                            |     |       |
| CCC (X1)       | -19.521                     | 1.946                      | -10.029 | .000  |
| Sales Growth   | -.490                       | .922                       | -.531 | .003  |
| Total Assets   | .364                        | .032                       | .018  | .000  |

Table 1, shown two variables: X1 (Cash Conversion Cycle) and X2 (Total Assets) have a low significance value (<0.05). It shows that the cash cycle or Cash Conversion Cycle and total assets are very sharp. Both variables can be overestimated, and therefore the two variables are not involved in the research model.

A. Correlation Coefficient Test

In this test, the correlation value will test value determination, value study model, the value of the regression equation, and the value of the regression coefficient test. Tests on the model of multiple linear regression study are presented in Table 2.

**TABLE II. CORRELATION MODEL RESEARCH**

| Model | R   | R Square | Adjusted R Square | Std. Error of The Estimate | Durbin-Watson |
|-------|-----|----------|-------------------|---------------------------|---------------|
| I     | .992| .983     | .980              | .86056                    | 1.788         |

Table 2 shows that the value of R (correlation coefficient) is equal to 0.992. That is the positive relationship is in the strong category. The value of Adjusted R Square / R² (coefficient) is the square of the correlation coefficient value is worth 0.980. This means that independent variables can explain 98% of the variable working capital, while the remaining 2% are influenced by other factors not examined in this study.

B. Test-F

F test is used to determine the effect of independent variables on the dependent variable simultaneously or together. The test results simultaneously presented in Table 3.

**TABLE III. TEST RESEARCH MODEL**

| Model      | Sum of Squares | df | Mean Square | F     | Sig.  |
|------------|----------------|----|-------------|-------|-------|
| Regression | 661.621        | 3  | 220.540     | .000  |
| Residual   | 11.108         | 15 | .741        | 297.801 | .000  |
| Total      | 672.729        | 18 |             |       |

Tabel 3, shown F count (297.801) > F table (5.02) with sig 0.000 <0.05 mean H0 rejected and H1 accepted. The independent variables simultaneously significant effect on the dependent variable. To get an idea of the significance of each independent variable, it is necessary to the partial test (t test).

C. t-test

The t-test was used to test the effect of independent variables on the dependent variable partially. The test results are presented in Table 4.

**TABLE IV. PARSIAL TEST**

| Model          | Unstandardized Coefficients | Standardized Coefficients | t   | Sig.  |
|----------------|-----------------------------|----------------------------|-----|-------|
| (Constant)     |                             |                            |     |       |
| CCC (X1)       | -19.521                     | 1.946                      | -10.029 | .000  |
| Sales Growth   | -.490                       | .922                       | -.531 | .003  |
| Total Assets   | .364                        | .032                       | .018  | .000  |

Based on partial test results, cycle cash conversion cycle influences working capital. This shows that the most quick of cash fund guide in sign of its companies, then working capital also increased. Management assets should consider company easy in receiving the funds for production activities.

IV. CONCLUSIONS

Based on these descriptions, it can be concluded that the results of multiple regression analysis showed regression equation Y = -19.521 + 0.090 X1 + 0.364 X2 - X3 0.49. Constant - 19.521 which means that the variable working capital without being influenced by any variable is equal -19.521. Cycle Cash/Cash Conversion Cycle (X1) significantly influence
working capital. The growth rate of sales (X3), no significant effect on working capital at a rate of 5%.

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