RESEARCH ARTICLE

EFFECT OF SALES GROWTH, TURNOVER WORKING CAPITAL AND LIQUIDITY RECEIVABLES TURNOVER ON THE VARIOUS INDUSTRIES COMPANY LISTED ON THE STOCK EXCHANGE

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ABSTRACT

The purpose of this study was to determine the effect of sales growth, turnover of receivables and working capital turnover to liquidity at various industrial companies listed on the Indonesian Stock Exchange (BEI). The method used is quantitative research methods, has a hypothesis, and using secondary data. The sampling method used was purposive sampling technique. The method used to analyze the relationship between the dependent variable and the independent variable is the method of multiple linear analysis. By t-test to see the effects of the individual and the F test to see the effects together. The results of this study indicate that sales growth variable has no effect on liquidity, working capital turnover affect the liquidity and receivables turnover has no effect on liquidity. Simultaneously, sales growth, working capital turnover and accounts receivable turnover effect on liquidity.

INTRODUCTION

Globalization of the world economy led to an increase in development of business in Indonesia. Characteristics of the business world today is characterized by rapid development in all fields. This development has increased to meet the needs of society and consequently competition between enterprises increasingly competitive, particularly for similar companies.

One component is to assess the company's financial liquidity ratio analysis or liquidity ratios. Thus, the company is able to meet obligations in a timely manner means that companies in the liquid state and the company has payment instruments or assets are greater than current debt. So, by looking at the liquidity of a company, the creditor may assess the merits of the company. In general, the higher the liquidity, the lower the risk of company failure. The main activities that can provide benefits to the company is to make the sale. Sales can be done in two ways, namely cash and credit. Credit sales will cause accounts for the company. Turnover of receivables and working capital turnover is very important for a company

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because it is a ratio used to measure the efficiency of working capital in a company. The existence of sufficient working capital allows a company does not have difficulties and obstacles that might arise in their activities. The amount of working capital is one measure that can be used to solve the problem of liquidity of the company. Accounts receivable turnover is high then the condition of the existing capital will be higher and the company said liquid Companies should be really careful in investing company with the goal to maintain the company's liquidity.

Formulation Problems

As for the formulation of the problem in this research are as follows:

- What is the effect on the sales growth rate of liquidity?
- What is the effect on the working capital turnover liquidity?
- Is the receivables turnover effect on liquidity?
- Is the sales growth, working capital turnover and accounts receivable turnover effect on liquidity?

Research Objectives

This study aims to test and find empirical evidence regarding:

- To examine and analyze the effect of sales growth to liquidity.
- To test and analyze the effect on the liquidity of working capital turnover.
- To test and analyze the effect on the liquidity of receivables turnover.
- To test and analyze the effect of sales growth, working capital turnover and accounts receivable turnover on liquidity

Literature

Financial Statements: According to Hery (2015: 3) states that "the financial statements is the result of a series of accounting process that can be used as a tool to communicate the company's financial data or activity to the parties concerned".

Liquidity: According to Hery (2015: 175) "Liquidity is the ability of the company to meet its short term obligations". Companies that have a high liquidity ratio will be of interest to investors and would also affecting stock prices tend to rise due to high demand. The increase in share price indicates good performance and this will also have an impact on investors because they will earn high returns on their investments.

Ratios for Measuring Liquidity: According to Kashmir (2012: 134) reveals that, the types of liquidity ratios that can be used to measure the ability of the company, namely:

- The current ratio
- The ratio is very smooth
- Ratio of cash
- Ratio of cash turnover
- Inventory to net working capital

Sales

Understanding Sales: Sales is the activity offers a range of products which have been provided by trying to convince and inspire prospective buyers be willing to buy the products offered. According Baridwan (2008: 32) "proceeds of the sale is the result of quantitative time to sell so therein do not include value added tax and other costs not included in the results of the sale".

Classification Sales

In general, the transaction can be done in two ways:

- Cash sales
- Credit sales

Sales growth

Sales growth formula:

Sales Growth = (St – St -1) x 100%
St-1

Description Formula:
St = Sales in year t
St-1 = Sales in the previous year

Working capital

Understanding Working Capital: According Munawir (2004: 114) working capital can be divided according to the concept as follows:

- Quantitative Concept
- Qualitative Concept
- Functional Concept

Sources of Working Capital: Munawir (2004: 122) reveals that in general a source of working capital a company can come from:

- Operating Results Company
- Gain on sale of marketable securities (short-term)
- Sale of non-current assets.
- The sale of shares or bonds.

Usefulness of Working Capital: This working capital should be available in sufficient quantities to enable companies to operate economically and is not experiencing financial difficulties, for example, can cover losses and overcome a crisis without jeopardizing the company's financial condition According to Kashmir (2012: 253) reveals that the working capital for the company is to:

Meet the liquidity needs of the company, meaning that the company's liquidity is very dependent on working capital management.

- Meet obligations on time.
- Having sufficient preparation in order to meet the needs of its customers.
- Obtain additional funds from the creditors, if the ratio of financial qualify as liquidity is assured.
- In order to maximize the use of current assets to increase sales and profits.
- Companies can protect themselves in the event of a crisis of working capital due to the falling value of current assets.

Factors Affecting Working Capital Needs: According Sawir (2001: 136) argues that capital requirements can be affected four common factors and five special factors, these factors are as follows:

- The general factors such as: volume of sales, seasonal factors, technological developments, and the company's philosophy.
- Special factors such as: size of the company, the company's activities, the availability of credit, behavior facing profits, and behavioral risk.

Working Capital Turnover: Munawir (2004: 80) mentions "working capital turnover shows the relationship between working capital to sales and show the number of sales that can be obtained for each rupiah working capital". Formulation of Working Capital Turnover (WCT) or working capital turnover According Sawir is as follows (2001: 16):

WTC =   Sales   x 100%
     (Current Asset - Current Liabilities)

Receivables

Definition of Receivables: According Kieso (2002: 386) "Receivables are claims of money, goods, or services to the customer or party - the other party". Receivables are elements of working capital that is always in a state of rotating continue - constantly in the chain, namely working capital turnover; Cash-Inventory-cash ".

Role and Significance of Receivables: Receivables is an element of working capital that is also always in a state of rotating continuously working capital turnover in the chain, namely: Cash into goods becomes receivable will return to Cash.

Factors That Affect The amount Investments in receivables: According to RJ (2010: 85), factors that affect the size of investments in receivables are:

- Credit Sales Volume
- Payment Terms Credit
- Provisions on Credit Restrictions
- Wisdom in the Collection of Receivables
- The pay practices of the subscription

Receivable turnover: According to RJ (2010: 90) "Trade is an element of working capital which is always in a state of spin, meaning that receivables will be collectible at any given moment and will arise again as a result of sales and so on".
This ratio shows the efficiency of the management of the company's receivables. The higher the ratio shows the working capital invested in lower receivables. Formulation of the receivable turnover (RT) or accounts receivable turnover is (Riyanto, 2010: 90):

$$\text{Accounts Receivable Turnover} = \frac{\text{Sales}}{\text{Average Receivables}} \times 100\%$$

Influence Sales Growth Against Liquidity: Sales growth is a way to assess the company's sales increase from year to year. The growth rate of a company can be seen from the increase in volume and an increase in prices, especially in terms of sales as selling is an activity that is generally undertaken by companies to get a goal to be achieved is the level of expected profit.

The Effect Of Liquidity Working Capital Turnover: Working capital is one element that is very important asset in the company because without working capital, the company can't meet the needs funds to run its activities. Working capital of each company is different. Depending on the needs of the company. Given the importance of working capital for the company, financial management should be able to plan with good amount of working capital that is appropriate to the needs of the company.

Effect of Liquidity Against Receivable Turnover: Receivables will always have a turnover for the company is still carrying out its operations. Assets as one important part of which is owned by the company to meet its obligations, including the receivables. The faster or the higher the receivables turnover, the higher the level of liquidity of the company. This is because the shorter the time embedding funds in accounts, by itself the investments made in our receivables into cash quickly and the company earned revenue

on the sale of the inventory. Thus minimizing the risk of the company not be able to meet its short term obligations.

Effect of Sales Growth, Turnover: Work and Accounts Receivable Turnover on Liquidity. Companies should be able to do the proper management of accounts receivable as at certain moments, accounts receivable can also be a cost for the company when the company can not collect on the customer. As well as sales, often companies also make purchases on credit either because of the unavailability of cash or because they want to take advantage of discounts. This will cause the company's liabilities. These obligations can be classified into short-term debt and long-term debt. Short-term debt or the current debt should be repaid as soon as possible.

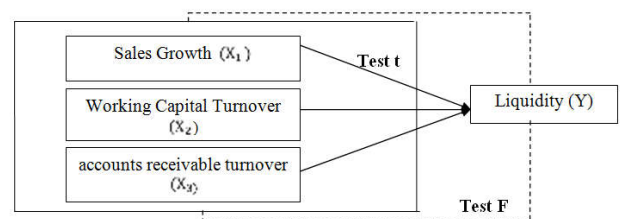## CONCEPTUAL FRAMEWORK

Hypothesis

The hypothesis in this study are:

Figure 2.1. Conceptual Framework

H1: Sales growth effect on liquidity.

H2: Turnover of working capital effect on liquidity.

H3: Receivables turnover effect on liquidity.

H4: sales growth, working capital turnover and accounts receivable turnover effect on liquidity.

Research methods

Population and Sample: The population in this study are all companies of various industries listed in the Indonesia Stock Exchange during 2011-2013. Total population in this study is 39 companies. The names of the company can be found in the appendix. The samples in this study is based on a purposive sampling method. The samples used in this study were 24 companies 2011-2013.

Operational Variables

Multiple Linear Regression Analysis

The method of analysis in this study using multiple linear regression analysis. The general equation used is:

$$Y = \mu + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

description of the formula:

Y: Liquidity
α:
α: Constants

$\beta_1, \beta_2, \beta_3, \beta_4$: Regression Coefficients

X_1: Sales Growth

X_2: Working Capital Turnover

X_3: Accounts Receivable Turnover

e: Coefficient Error

Hypothesis Testing

- T test (Test Partial Regression Coefficients)
- Test F (Testing the overall significance of regression)

RESULTS AND DISCUSSION

RESULTS

Descriptive Statistics: Descriptive analysis was used to provide a picture or description of the dependent variable and independent variables at various industrial companies listed on the Stock Exchange during the period 2011-2013. Descriptive research data can be seen in Table 4.1 below.

Descriptive Data Research

Normality test: Non- parametric statistical test Kolmogorov-Smirnov (K-S). This test is a test for normality of data determine with first hypothesis testing:

- H_0: Data residual normal distribution

- H_a: Residual data is not normal

With the provision that if the probability> 0.05 then H_0 is accepted and if the probability <0.05 then H_0 is rejected and H_a accepted, as can be seen in Table 4.2 below:
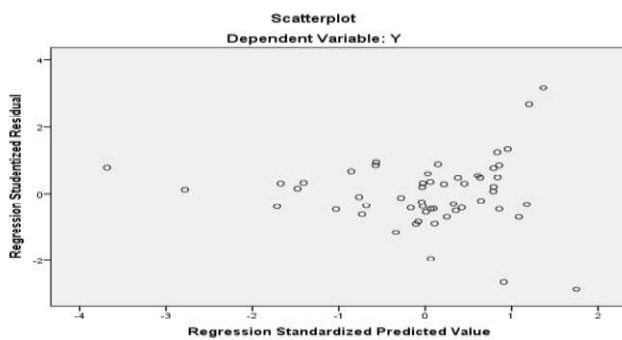

Figure 4.2. Test Heteroskidastity

K-S Test. Based on the K-S test results in table 4.2 above, the probability is significant at .200 and values above 0.05. So we can conclude that the data means accepting and rejecting residual data is normally distributed.

Test Multicollinearity: Testing criteria is if the tolerance value ≤ 0.10, or equal to the value of VIF ≥ 10 then there is any indication multicollinearity. A good regression model should be no correlation between variables, because the correlation of the causes of these variables are not orthogonal. The results of each independent variable can be seen as follows. Based on Table 4.3. above, it can be seen the value of tolerance and VIF for each variable research is as follows: a.

Tolerance value for the variable X1sebesar 0.934> 0.10 and VIF 1,071 <10 so that the variable X1 declared no symptoms multicollinearity. b.Tolerance value for the variable X2 for 0.939> 0.10 and VIF 1,065 <10 so X2 declared no symptoms multicollinearity. c.Tolerance value for the variable X2 for 0.967> 0.10 and VIF 1.034 <10 so X2 declared no symptoms multicollinearity.

Test heteroscedasticity: A good regression model is that not happening heteroscedasticity. In this study to see whether there is going heteroscedasticity can be seen from the following graph scatterplot. Based on Figure 4.2 above can be seen that the data (dots) evenly spread above and below the zero line on the Y axis and does not form a specific pattern so that it can be concluded on a regression test is not the case heteroscedasticity.

Test Autocorrelation: Autocorrelation test aims to test whether the linear regression model was no correlation between bullies error in period t with bullies error in period t-1 (previous period). In this study to see whether there is going autocorrelation performed by test Durbin - Watson (DW test).

The hypothesis to be tested are:

- H0: No autocorrelation (r = 0)
- Ha: There autocorrelation (r ≠ 0)

Based on the results shown in table 4.5 above the value DW of 2.007 with a sample of 72 (n) and the number of third-independent variable (k), then the value du = 1.7054 and the value of 4-du = 2.2946 so the value du <d < 4-du.

Testing Hypotheses: The analysis used to test the hypothesis in this study is multiple regression analysis that aims to see the effect of sales growth, working capital turnover and accounts receivable turnover to liquidity at various industrial companies listed in Indonesia Stock Exchange 2011-2013 period were processed with SPSS (Statistic Package for Social Science) version 22.

Significance test Partial (statistical test t)

Sales Growth Against Liquidity: Based on the design of hypothesis testing that has been predetermined, then the hypothesis of the influence of sales growth to liquidity formulated as follows:

H1: Sales growth effect on liquidity

From table 4.6 above can be seen that the t value of a sales growth of 0.457 with significance value is 0.649 while t table value at = 0.05 obtained a value of 1.99547 means that if t <t table. Then the decision rejecting H1, which means sales growth did not affect the company's liquidity in various industries listed on the Stock Exchange in 2011-2013.

Against Liquidity Working Capital Turnover: Based on the design of hypothesis testing that has been predetermined, then the hypothesis of the influence of sales growth to liquidity formulated as follows:

H2: Turnover of working capital effect on liquidity

From table 4.6 above can be seen that the t value of the working capital turnover amounting to -3.882 with a

Table 3.1. Operational Variables

Variables	Indicator	Scale
Liquidity Quick ratio (Y)	$\dfrac{\text{Current asset} - \text{Stock}}{\text{Current Liabilities}}$	Ratio
Sales Growth (X_1)	$\dfrac{(St - St\text{-}1) \times 100\%}{St\text{-}1}$	Ratio
Formulation of Working Capital Turnover (WCT) (X_2)	$\dfrac{\text{Sales}}{(\text{Current Asset} - \text{Current Liabilities})} \times 100\%$	Ratio
Accounts Receivable Turnover (X_3)	$\dfrac{\text{Sales}}{\text{Average Receivables}} \times 100\%$	Ratio

Table 4.1. Descriptive Data Research

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Y	72	,00	2,49	,7925	,49579
X1	72	-,43	,85	,1878	,20426
X2	72	-278,45	428,64	7,9312	64,63144
X3	72	2,64	25,71	9,1238	5,42786
Valid N (list wise)	72				

Descriptive Statistics

Source: Results of the study, the data is processed (2015)

Table 4.2. One-Sample Kolmogorov-Smirnov Test

		K-S Test
		Y
N		72
Normal Parameters [a,b]	Mean	,7925
	Std. Deviation	,49579
Most Extreme Differences	Absolute	,074
	Positive	,062
	Negative	-,074
Test Statistic		,074
Asymp. Sig. (2-tailed)		,200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Source: Results of the study, the data is processed (2015)

Table 4.3. Test Multicollinearity Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,633	,225		7,269	,000		
	X1	,130	,284	,057	,457	,649	,934	1,071
	X2	-,214	,055	-,486	-3,882	,000	,939	1,065
	X3	-,118	,103	-,142	-1,146	,257	,967	1,034

a. Dependent Variable: Y
Source: Results of the study, the data is processed (2015)

Table 4.5, Test Autocorrelation Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,513[a]	,263	,219	,39442	2,007

a. Predictors: (Constant), X3, X2, X1
b. Dependent Variable: Y
Source: Results of the study, the data is processed (2015)

Table 4.6. Results of Multiple Linear Regression Analysis

variable name	B	t_{hitung}	Sig (t)
Constanta	1,633	7,269	,000
Sales growth (X_1)	,130	,457	,649
Working Capital Turnover (X_2)	-,214	-3,882	,000
Receivable turnover (X_3)	-,118	-1,146	,257

Correlation coefficient (R) = ,513
coefficient of Determination (R^2) = ,263
Adjusted (R^2) = ,219
F_{hitung} = 5,950
F_{tabel} = 2,74
Sig (F) = ,001
t_{tabel} = 1,99547

Source: Results of the study, the data is processed (2015)

significant value was 0.000 while t table at = 0.05 obtained a value of 1.99547 means that if t > t table. Then the decision receives H2 which means that the working capital turnover affect the liquidity of the company's various industry listed on the Stock Exchange in 2011-2013.

Against Receivable Turnover Liquidity: Based on the design of hypothesis testing that has been predetermined, then the hypothesis influence receivables turnover to liquidity formulated as follows:

H3: Receivables turnover effect on liquidity

From table 4.6 above can be seen that the t value of the accounts receivable turnover amounting to -1.146 with a significant value was 0.257 while t table value at = 0.05 obtained a value of 1.99547 means that if t <t table. Then the decision rejecting H3 meaning receivable turnover does not affect the company's liquidity in various industries listed on the Stock Exchange in 2011-2013.

Simultaneous significance test (the test statistic F): From Table 4.6 it can be seen that the calculated F value of 5.950 with significant value 0,001 at level of 95%. While the F table obtained a value of 2.74 in = 0.05, thus F count> F table, namely 5.950> 2.74 and significant value 0.001 <0.05. From the results of this test means accepting H1 F. Thus sales growth, working capital turnover and accounts receivable turnover affect the company's liquidity in various industries listed on the Stock Exchange in 2011-2013.

DISCUSSION

Influence Sales Growth Against Liquidity: The results of significance test t test showed that sales growth has no effect on liquidity. It can be seen from the level of significance of sales growth amounted to 0.649 greater than 0.05. This study therefore reject H1 and stated that sales growth has no effect on liquidity. Obtained sales growth of sales this year compared with the previous year's sales. If the sale of the company increases, resulting in increasing supplies needed, this resulted in the company provides supply more and more. This resulted in a reduction of funds available in the company to meet its short term obligations. The results are consistent with research conducted by Rian Muharsyah (2013) who studied the effect of the level of growth in sales and accounts receivable turnover to liquidity stated that sales growth has no effect on liquidity. And research conducted by Oktianda (2010), with the title of the effect of the sales growth rate and turnover rate of receivables to liquidity. Results from these studies suggest that the level of growth of sales and accounts receivable turnover rate does not affect the level of liquidity.

The Effect Of Liquidity Working Capital Turnover: The results of significance test t test showed that the turnover of working capital effect on liquidity. It can be seen from a significance level of working capital turnover of 0.000 less than 0.05. Thus the study received H2 and stated that the turnover of working capital effect on liquidity but have a negative impact direction. The negative effect implies that the turnover of working capital has an influence not in line with the level of liquidity. The higher working capital turnover, the lower the level of liquidity.

Effect of Liquidity Against Receivable Turnover: The results of significance test t test showed that the receivable turnover has no effect on liquidity. It can be seen from the level of significance receivable turnover amounted to 0.257 greater than 0.05. This study therefore reject H3 and stated that the receivables turnover has no effect on liquidity. Accounts receivable turnover obtained from the sale of the division to be reduced accounts receivable in the previous year. The result showed that the accounts receivable turnover decreased from year to year. This resulted in the length of the accounts receivable. So companies do not get a refund of receivables on time when funds were needed as to meet its short term obligations.

Conclusion and suggestion

Conclusion

Based on the research that has analyzed the above, it can be concluded as follows:

- The sales growth did not affect the company's liquidity in various industries.
- Turnover of working capital affect the liquidity of the company's various industries.
- Receivables turnover did not affect the company's liquidity in various industries.
- The sales growth, working capital turnover and accounts receivable turnover affect the company's liquidity in various industries.
- The coefficient of determination of 0.263 which means that the independent variables are able to explain the dependent variable amounted to 26.3%,

Suggestions

- The company must pay more attention to its sales policy to be able to maintain its liquidity.
- The company should be able to manage working capital well due to working capital adversely affect the liquidity.
- Since accounts receivable is the most liquid current assets after cash, the company should pay more attention to policy accounts receivable as a period to be able to maintain its liquidity.
- Therefore, the company's various industry sales growth, working capital turnover and accounts receivable turnover effect on liquidity, further research is expected to examine the other companies so that the results can be generalized.
- In a subsequent study is expected to develop other factors that may affect liquidity. since in this study only 26.3% were able to explain the liquidity variables, while 73.7 is explained by other variables not included in this study.

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