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**ANALYSIS OF CASH AND TURNOVER DUE TO PROFITABILITY IN  
MANUFACTURING COMPANIES LISTED IN INDONESIA  
STOCK EXCHANGE (IDX) YEAR 2011-2015**

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**Abstract**

The purpose of this research is to analyze the effect of cash turnover, accounts receivable turnover to profitability. The profitability of manufacturing firms in Indonesia is influenced by a variety of financial factors yang dapat measured using financial ratios. Secondary data used in this study are the financial statements of companies manufacturing food and beverage industry as well as textile listed on the Stock Exchange. The sampling method used is purposive sampling and acquired 32 companies in the sample. The independent variable in this study is the velocity of cash and accounts receivable turnover while the dependent variable is profitability. The analytical method used is multiple linear regression analysis F test and T test. The result of this research is the analysis of cash turnover and accounts receivable turnover simultaneous effect on profitability. And partial analysis of both variables also affects profitability.

**Key Words:** Accounts Receivable Turnover, Turnover Cash, Profitability

**1. Introduction**

In any economic system, where the company or business organization makes competition between companies is getting tougher. This is what triggered the company to implement a good strategy in any business activities to achieve corporate objectives. For besides management required to coordinate the use of all company resources efficiently and effectively, it is also required to make decisions that can support the achievement of a company, so it can develop into large and powerful firms. Working capital is an investment that is used by companies to finance daily operations kegiatann. Working capital is very important because it is used as a means of support in implementing the company's operations were always spins in a certain period, where investment is used is expected to be back in less than one year and can produce the maximum profit. The size of the high and low levels of cash and cash turnover to the efficient use of cash in the company. The more cash in the company means that more cash is less effective and could have an impact on profitability. To obtain maximum benefit, a company must maintain profitability and can continue to grow and provide profitable returns for their owners. The more cash in the company means that more cash is less effective and could have an impact on profitability. To obtain maximum benefit, a company must maintain profitability and can continue to grow and provide profitable returns for their owners. The more cash in the company means that more cash is less effective and could have an impact on profitability. To obtain

maximum benefit, a company must maintain profitability and can continue to grow and provide profitable returns for their owners.

Cash needed good company to finance the company's operations daily and permit new investment in fixed assets. Cash turnover illustrates the ability of cash to generate revenue in order to see how many times the cash rotates within a specific period. The higher the turnover rate of cash the faster return of cash to the company. Thus, the cash can be reused to finance operational activities that do not interfere with the company's financial condition and can increase profits for the company.

Receivables are assets that arise due to credit sales. Accounts receivable turnover is the ratio between sales and average loans receivable. Accounts receivable turnover indicate an attempt to measure how often receivables into cash in one period. The higher the accounts receivable turnover the faster return of cash to the company. Thus, it can be reused cash to fund operations so that the company's operations run smoothly according to the desired target and can increase profits for the company. Profitabilitas become issue is very important. Due to the leadership of the company, profitability is used as a measure of success or failure of the company he leads.

However, to measure the level of profit a company used the ratio of profit or profitability ratios. Profitability ratios to assess the company's ability to achieve profit levels also assess the company's ability to reach the size of the effectiveness of management of a company. this is also shown by the profits generated from the sale of credit with investment income. The aim is that visible progress within a certain timeframe. Profitability profit is a measure of the percentage by which to judge the extent to which the company is able to generate profits at an acceptable level.

Based on this background, the writer will do research with title "Analysis of the Effect of Cash and Accounts Receivable Turnover Turnover on Profitability In Manufacturing Companies Listed on the Stock Exchange Year 2011-2015".

## **2. Underlying Theory**

### **3. Research Methods**

This study is to analyze the effect of cash turnover, accounts receivable turnover to profitability. The profitability of manufacturing firms in Indonesia is influenced by a variety of financial factors which can be measured using financial ratios. Secondary data used in this study are the financial statements of companies manufacturing food and beverage industry as well as textile listed on the Stock Exchange. The sampling method used is purposive sampling and acquired 32 companies in the sample. The independent variable in this study is the velocity of cash and accounts receivable turnover while the dependent variable is profitability. The analytical method used is multiple linear regression analysis test F and test T.

#### **2.1 Population Research.**

The research data was obtained from the company's annual report for the year 2011-2015 by using purposive sampling method which includes the independent auditor's report and financial statements of companies manufacturing consumer goods sector and textile industry. The samples used to represent the condition of the Indonesian public company listed on the Indonesia Stock Exchange.

Based on predetermined criteria authors have obtained a total of 32 samples that meet the criteria and can be used as a sample means a sample of 32 companies multiplied by 5 years so the sample in this study as many as 160.

## 2.2 Data Research

The data collected in this research is secondary data. Secondary data is data that indirectly or through a third party document. The data source is obtained from the internet via the official website of Indonesia Stock Exchange (IDX) [www.idx.go.id](http://www.idx.go.id). Data in the form of the company's annual financial report of the year 2011-2015 on accounts receivable cash flows and other data to support this research.

**Table 1. Stages Sampling**

No .	Criteria	Information
1.	Manufacturing companies listed in Indonesia Stock Exchange from the year 2011-2015	117
2.	Companies that publish audited financial statements (annual report) for 2011-2015	117
3.	Companies manufacturing sector consumer goods and textiles industries listed on the Stock Exchange	59
4	These companies are in a row do not have complete data sets for research	32
The number of samples per year		32
The number of samples over the period 2011-2015 (32 x 5 = 160)		160

## 2.3 Research Variables

### Independent Variables 2.3.1

The independent variable is a variable whose existence is influenced by other variables and is a factor that can affect the dependent variable. The independent variables in this study consisted of:

X1: Turnover Cash

According to Bambang RJ (2011: 94) cash turnover is the ratio between sales by the number of average cash. This ratio is measured by the formula:

**Cash Turnover Ratio** = Annual Revenue : Average Cash Balance

The higher the turnover rate of cash means faster return of cash to the company. thereby returning the cash will be used to fund operations so it does not interfere with the company's financial condition.

X2: Accounts Receivable Turnover

Receivables turnover is a ratio that describes the quality of the receivables in the company and how the company's success in charging it.

This ratio is used to estimate how many times in a given period, the amount of the cash inflows from the receivables perusahaan obtained. This ratio is calculated using the formula:

$$\text{Accounts Receivable Turnover} = \frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

### 2.3.2 Dependent Variables

The dependent variable is the variable that is influenced by other variables. In relation to the variables studied then that will be the dependent variable is the level of profitability as measured by return on assets (ROA) textile and food manufacturing companies listed on the Stock Exchange.

This ratio using the ratio of net income by total assets.

#### Return on Assets Ratio

$$\text{Return on Assets Ratio} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

## 2.4 Data Analysis Methods

### 2.4.1 Normality Test

Normality Test is used to test whether the regression model has a normal distribution or not. Kolmogorov test is used for statistical test whether the data were normally distributed or not normal distribution. Kolmogorov test with the following conditions: if the value of kolmogorov significantly greater than the value of significance of 0.05, the data are normally distributed.

### 2.4.2 Test Heteroskedastisity

Heteroskedastitas test aims to test whether the regression model occurred inequality residuan variance in observation of one another to different observations, whereas in the absence of inequality variance of residual observation to observation the other one remains then called homokedastisitas.

To test whether there heteroskedastistas one can use Rank Spearman test is to correlate each independent variable on the absolute value of the residual. The regression model does not contain heteroskedastistas if absolute residual values above  $\alpha = 0.05$ .

### 2.4.3 Test of Autocorrelation

Autokolerasi test aims to test whether the linear regression model Bergama no correlation between bullies error in period  $t-1$ . To test for the presence or absence of symptoms, it can be didektesi autokolerasi with Durbin-Waston test.

**Table 2. Durbin Watson**

<b>The null hypothesis</b>	<b>Decision</b>	<b>If</b>
Cut no positive autocorrelation	Reject	$0 < d < d_l$
Cut no positive autocorrelation	No desicison	$d_l \leq d \leq d_u$
Cut no negative correlation	Reject	$d - d_l < d < 4$
Cut no negative correlation	No decision	$d - d_u \leq d \leq 4 - d_l$
Cut no autocorrelation, positive or negative	Tdk rejected	$d_u < d < 4 - d_u$

### 2.4.4 Test Multikolonierisitas

Is a situation in which some or all of the independent variables are strongly correlated. If there is strong correlation amongst the independent variables then the consequences are:

1. Coefficient-regression coefficient can be estimated.
2. The value of the standard error for any regression coefficient becomes infinite.

Basis of decision-making:

1.  $VIF > 10$  then the correlation between the independent variables occur Multikolonierisitas.
2.  $VIF < 10$  then between the independent variables Multikolonierisitas correlation does not occur.

### 2.4.5 Hypothesis Testing

a. t test

The t-test was used to test the effect of each - each independent variable (cash flow from operating activities, cash flows from investing activities and cash flows from financing activities) to the dependent variable (financial performance). The measures used are as follows:

a. Determining the composition of the hypothesis

Ho:  $\beta_1 = 0$ , there is no significant influence of cash flow from operating activities, cash flows from investing activities and cash flows from financing activities on the dependent variable (financial performance) together.

Ha:  $\beta_1 \neq 0$ , there is significant influence between cash flow from operating activities, cash flows from investing activities and cash flows from financing activities on the dependent variable (financial performance) together.

b. Determining the significant level  $\alpha = 5\%$

To determine acceptance or rejection  $H_0$ , then the calculation results of significance (sig) compared to significant level of 0.05. If  $\text{sig} < 0.05$  then  $H_0$  is rejected, which means there is a significant influence of the independent variable on the dependent variable, and vice versa if  $\text{sig} > 0.05$  means that there is no significant influence of the independent variable on the dependent variable. Another way to determine acceptance or rejection of  $H_0$ , is by comparing t arithmetic with t table. If  $t > t$  table then  $H_0$  is rejected, which means there is a significant influence on the independent variable on the dependent variable, and vice versa if  $t < t$  table which means that there is no significant effect of independent variables on the dependent variable.

### 2.4.7 Significant Simultaneous Test (Test F)

F statistical test aims to test the effect of all independent variables or free (cash flow from operating activities, cash flows from investing activities and cash flows from financing activities) together or bonded to the dependent variable (financial performance). This test is performed with SPSS 17. The steps of the test are:

a. Determining the composition of the hypothesis

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ , there is no significant influence of cash flow from operating activities, cash flows from investing activities and cash flow from financing activities of financial performance together.

$H_0: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$ , there is significant influence between cash flow from operating activities, cash flows from investing activities and cash flow from financing activities of financial performance together.

b. Determining significant level of  $\alpha = 5\%$

To determine acceptance or rejection  $H_0$ , then the calculation results of significance (sig) compared to significant level of 0.05. If  $\text{sig} < 0.05$ , then  $H_0$  is rejected, which means there is a significant influence of the independent variable on the dependent variable, and vice versa if  $\text{sig} > 0.05$ , meaning there is no significant influence of the independent variable on the dependent variable. Another way to find  $H_0$  is accepted or rejected by comparing the F arithmetic with F table. If F arithmetic  $>$  F table then  $H_0$  is rejected, which means there is a significant influence of independent variables together on the dependent variable, and vice versa, if F count  $<$  F table then  $H_0$  is accepted, which means there is no significant effect of independent variables together to variable dependent.

c. The coefficient of determination ( $R^2$ )

This test is performed to determine how much influence the independent variable (cash flow from operating activities, cash flows from investing activities and cash flows from financing activities) to the dependent variable (financial performance).

Coefficient of determination is between 0 and 1. The smaller the value of  $R^2$  which means the ability of independent variables is very limited.  $R^2$  is said to be good if it is getting close to 1. If  $R^2$  is equal to 1 means that the independent variable perfect effect on the dependent variable. Meanwhile, if  $R^2$  is equal to 0, then there is no influence of the independent variable on the dependent variable.

## 3.2 Hypothesis Testing Results

### 3.2.1 Results of Research Variables

In this study, the sample used is 36 samples, based on financial data Putra Officers Course Institution Sukoharjo for 3-year period 2014 to 2016. The results of multiple linear regression

analysis with the help of a computer application program Package For Social Science (SPSS) 16.0 For Windows, it is obtained results like this brought.

**Table 2. Descriptive Statistics**  
**Descriptive Statistics**

	N	mini mum	Max	mea n	Std. deviation
AKO	36	2,41 1	27 869	8.21 397	4.367243
BATT ERY	36	.001	.007	.003 00	.001352
AKP	36	19 028	178 322	5.60 14	27.357909
perfor mance	36	.007	.058	.017 58	.013483
Valid N (listwi se)	36				

Source: Data processed, 2017

From the table above variable operating cash flow (X1) with the amount of data (N) of 36, shows the average (mean) of 8.21397% with a standard deviation of 4.367243. Operating cash flow highest value and lowest value 2.411 27.869. Variable investment cash flow (X2) based on Table 4.1 to the amount of data (N) of 36, shows the average (mean) of 0.00300% with a standard deviation of 0.01352. Investment cash flow has the highest value and the lowest value of 0.01 to 0.07. Variable financing cash flow (X3) based on Table 4.1 to the amount of data (N) of 36, shows the average (mean) of 5.6014% with a standard deviation of 27.357909. Financing cash flow has the highest value and the lowest value of 19 028 179.322. Kananga performance based on Table 4.1 to the amount of data (N) of 36, shows the average (mean) of 0.01758% with a standard deviation of 0.013483. The financial performance has the highest value and the lowest value 0.007 0.058.

### 3.2.2 Normality Test Results

Testing for normality in this study using the test Kolmogorov - Smirnov. The test results of normality can be seen in the table below:

**Table 3. Normality Test Results**

variables	Kolmogorov - Smirnov	<i>p-value</i>	Information
<i>Residual unstandardized</i>	1.355	.120	Distribution of the normal data

Source: Data processed, 2017

Kolmogorov-Smirnov test results show that the significance value of 1.355 is greater than 0.05. This shows that the regression equation to model in this study had a normal distribution of data.

### 3.2.3 Test Results Multicollinearity

**Table 4. Test Results Multicollinearity**

variables	tolerance	VIF	Information
PK	.992	1,008	Did not happen
PP	.992	1,008	multikolinearitas Did not happen multikolinearitas

Source: Data processed, 2017

Based on the above table shows:

- 1) Turnover Cash with VIF value of 1.008 is less than VIF 10 and the tolerance value of 0.992 is greater than the minimum tolerance value of 0.1 then there is no multikolinearitas.
- 2) Receivables Turnover by VIF amounted to 1.008 less than VIF 10 and the tolerance value of 0.992 is greater than the minimum tolerance value of 0.1 then there is no multikolinearitas.

### 3.2.4 Test Results heterokedastisitas

Heteroskedastisity test results with the regression model occurred inequality and residual variance of the observations to other observations. If the variance of the residuals of the observations to other fixed, then called homoskedastisitas and if different is called heteroskedasticity shown in Table 5 as follows:

**Table 5. Test Results Heteroskidastity**

Variables	P-value	Information
PK	.810	Not occur heteroscedasticity
PP	0,622	Not occur heteroscedasticity

Source: Data processed, 2017

Based on the results shown in Table 4.5 are:

- 1) Turnover Cash demonstrate the value of the P-value of 0.810 is greater than the 0.05 significance value of the free cash turnover heterokedastisitas problem.
- 2) Receivables Turnover shows the value of P-value of 0.622 is greater than the value of significance 0.05, receivable turnover free of problems heterokedastisitas.

### 3.2.5 Test Results autocorrelation

Results autocorrelation using Durbin-Watson Test. The autocorrelation test results as follows:

**Table 6. Test Results autocorrelation**

DW-count value	Criteria	Decision
2.014	1.770 <2.014 <2.230	There is no either positive or negative autocorrelation

Source: Data processed, 2017

Based on the 4.6 table by using the degree of error ( $\alpha$ ) = 5%, with a total predictor two upper limits (U) is equal to 1,770 being the lower limit (L) is equal to 2, .230 Because the value DW regression result amounted to 2,014, which means greater than the lower limit value, then the autocorrelation coefficient greater than zero. It can be concluded that the regression results free from problems of autocorrelation. In other words, the hypothesis that there is no autocorrelation problem is unacceptable, while the null hypothesis that there is autocorrelation can be rejected.

### 3.2.6 Hypothesis Test Results

This analysis is used to determine the effect of cash turnover and accounts receivable turnover against profitabilitas. Below multiple analysis results table:

**Table 7. Test Regression Analysis**

variables	Coefficient	t	Sig.
constants	1937.397	1,831	0.069
PK	0.926	2.489	0,003
PP	6.321	2,665	0,000
F count	5.290	F sig = 0,004	
adj R2	0,312		

Source: Data processed, 2017

Based on the analysis above table, the multiple linear regression model which can be obtained as follows:

$$Y = 1937.397 + 0,926PK + 6,321PP + e$$

To interpret the results of the analysis, can be explained:

1. From the results of hypothesis testing shows the magnitude of the constant variable profitability with positive parameters of 1937.397. This shows that if the variable cash turnover and accounts receivable turnover is assumed to be zero, then the profitability of companies in the Indonesia Stock Exchange will be at 1937.397.
2. From the regression equation above shows the regression coefficients with positive parameters cash turnover amounted to 0.926. Any increase cash turnover (PK) one time, it will increase the profitability of 0.926.
3. From the regression equation above shows the regression coefficients receivables turnover with negative parameter of 6.321. Any increase in accounts receivable turnover (PP) 1 time, it will increase the profitability of 6.321.

### 3.2.7 Test Results t

Based on the analysis results can be seen the t test results as shown in the following table:

**Table 7. Test Results of t**

Model		Coefficients unstandardized		Stand ar d			
		B	Std. Error	Coeffi ci-ents	beta	t	Sig.
1	(Con stant )	1937.397	1057.973			1,831	.069
	PK	.926	.372	.006		2.489	.003
	PP	6.321	2.372	.025		2,665	.001

Source: Data processed, 2017

From the results it can be seen Table 4.8 t test results for the variable cash turnover and accounts receivable turnover to profitability.

#### 1) Test Results Turnover t Variable Cash

From the results of the regression is known that the value of the variable t cash turnover amounted to 3,489 bigger than t table 2.000. With significant value of 0,003 is smaller than  $\alpha = 0.05$ . This indicates that the variable cash turnover significant effect on profitability.

#### 2) Test Results t Variable Accounts Receivable Turnover

From the results of the regression is known that the value of the variable t receivable turnover amounted to 2.665 greater than 2,000 table, the significance value of 0.001 is smaller than  $\alpha = 0.05$ . This shows that the accounts receivable turnover variable significant effect on profitability.

### 3.2.8 Test Results F

This test is intended to test whether the regression model with the dependent variable and independent variables have statistically significant effect. F test results obtained the following results:

**Table 8. Test Results F**

Model		Sum of Square	Df	mean Square	F	Sig.
1	Regression	1,796	2	8977837.031	5.290	.004a
	residual	2662	157	1696		
	Total	2664	159			

Source: Data processed, 2017

Based on the data generated from the calculation table. Gained 4.9 Fitting 5.290 greater than the F table with significance 0.004 2.53 less than the significant value of  $\alpha = 0.05$  so that it can be concluded that simultaneous or jointly variable cash turnover and accounts receivable turnover is a factor that affects the profitability variable.

F test results showed that the regression model used in this study has pointed out, the model goodness of fit.

### 3.2.9 Test R2

The coefficient of determination (R2) essentially measures how far the model's ability to explain variations in the dependent variable. Coefficient of determination is between zero and one. Here are the test results of the coefficient of determination.

**Table 9. Test Results R2**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426 a	.351	.312	13021.98695

**Model Summary**

The result of the calculation to the value of the coefficient of determination R2 obtained figures with adjusted-R2 of 0.312. This means that 31.2% of profitability variable variation can be explained by the variable cash turnover and accounts receivable turnover while the remaining 68.8% is explained by other factors outside the model studied.

#### **4. Conclusion**

##### **1. Cash Turnover significant effect on profitability of manufacturing companies listed in Indonesia Stock Exchange,**

Results of regression is known that the value of the variable t cash turnover amounted to 2.489 greater than 2,000 table with a significance value of 0.003 is smaller than  $\alpha = 0.05$ . This indicates that the variable cash turnover significant effect on profitability. This is because companies in business is always in need of cash. Cash outlay for a company may be continuously egg cash outlay for the purchase of raw materials, payroll and others, but besides that there is also a cash flow that is not continuous such as expenditures to pay interest, divined, income or profit.

##### **2. Receivables turnover significantly influence the profitability of manufacturing companies listed in Indonesia Stock Exchange.**

Results of regression is known that the value of the variable t receivable turnover amounted to 2.665 greater than 2,000 table with significant value of 0001 is smaller than  $\alpha = 0.05$ . This shows that the accounts receivable turnover variable significant effect on profitability. This is because the working capital accounts is an element that is also always in a state of continuously rotating chain working capital turnover. The greater the number of receivables of a company, the greater the risk but it can also be in line with memeperbesar profitability.

3. Rotation of cash and accounts receivable turnover together affect the profitability of manufacturing companies listed in Indonesia Stock Exchange.

Based on the analysis and discussion of the conclusions that can be drawn is:

Based on test results simultaneously obtained coefficient of determination with adjusted-R2 of 0.312. This means that 31.2% of profitability variable variation can be explained by the variable cash turnover and accounts receivable turnover while the remaining 68.8% is explained by other factors outside the model studied.

With the maximum cash turnover, the need for cash in the company's operations becomes fewer. The rest of this cash amount will be invested by the company into the various forms of activity that can maximize the profitability of the company. And increasing the number of credit sales from net sales of the company, it will increase the amount of investment in the form of receivables so as to increase profits for the company.

The results of this study are supported by a previous study conducted by Nina Susiana and Ni Kaput Pirate in his research entitled "Case Study of Manufacturing Sector Sub Sector Consumer Goods Industry Pharmaceuticals Listed on the Stock Exchange)", the results of the study showed that simultaneous cash turnover and accounts receivable turnover have a significant effect on profitability.

## 5. Bibliography

- Afrina, (2013). In the Cash Flow Statement Analysis Assessing Financial Performance on Cooperative Unit Sumber Makmur subdistrict Fullness.
- Darsono and Ashari. (2005). Practical Guidelines Understanding Financial Statements. Andi: Yogyakarta.
- Fahmi Irham. (2013). Financial Performance Analysis, Bandung: Alfabeta.
- Fahmi, I. (2006). In the Investment Analysis Economic and Political Perspectives, Bandung: Refika Aditama.
- Ghozali, Imam. (2011). Multivariate Analysis Application With IBM SPSS Program. Issue 5. Semarang: University Publishers Agency Diponegoro.
- Hanafii, Mamduh and Abdul Halim. (2005). analysis Financial statements, Second Edition. Publisher AMP-YKPN.
- Hanafii, Mamduh. (2007). analysis Report finance, Second Edition. Publisher AMP-YKPN.
- Harahap, Sofyan S. (2008). Above Critical Analysis Financial statements, Issue One, Jakarta: PT. King Grafindo Persada.
- Harahap, S. (2013). Critical Analysis of the Reports Keuangan, Jakarta: King Grafindo Persada.
- Hery Harjono Muljo. (2007). Accounting Theory. Jakarta: Salemba Four.
- Indonesian Institute of Accountants. (2012). Statement Financial Accounting Standards, Jakarta : Salemba Four.
- JuMingan. (2006). Financial Statement Analysis. Jakarta: Earth Literacy.
- Arikunto, Suharsimi, (2002), Research Procedure A Practice Approach, Jakarta. Rineka Reserved.
- Kieso, Donald E., Jerry J. Weygandt, and Terry D. Warfield. (2002). Accounting intermedite. Translation Emil Salim, Tenth Edition, Volume Three, Jakarta: Erland.
- Munawir. (2009). Accounting Management: Concepts Benefits and Engineering. Yogyakarta: YKPN.
- Masun, Mohammad. (2012). performance measurement Public Sector. Yogyakarta: BPFE.
- Rando Riski Bawelle, (2015). Cash Flow Analysis Net Operating as Performance Measurement Tools finance the cigarette industry dibursa effect Indonesia.
- Rakhman Syaeholliq, (2007). analysis Report Cash Flow to Assess Financial Performance (survey on food and beverage companies listed on the JSE).
- Sanusi, Anwar. (2012). Business Research Methodology. Third mold. Jakarta: Four Salemba.
- Silvia, (2015). Effect of cash flow on performance finance companies manufacturing listed on the Stock Exchange.
- Soemarsono, (2005). Accounting An Introduction. Five editions. Jakarta: Four Salemba.
- Sucipto. (2013). Financial Performance Assessment. Jakarta: Ghalia
- Wibowo, and Abubakar. (2003). Critical Analysis on Financial statements, Issue One. Jakarta PT. King Grafindo Persada ..