Analysis of Working Capital Management at Pt. Holcim Indonesia, TBK

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Abstract:- The research objective is to see the management of working capital at PT. Holcim Indonesia, Tbk. The type of data used is qualitative data and quantitative data. The data sources used are primary data and secondary data. The analytical method used is descriptive analysis method. Based on the results of research conducted at PT. Holcim Indonesia, Tbk can be seen that based on the calculation of the accounts receivable turnover ratio which reached the highest number, namely in 2012 which was 12 times with an average day period of collection of receivables for 30 days which means that receivables turnover is still not good because it is below the standard financial ratio of 15 times the 24-day average collection period. Based on the calculation of working capital turnover which reached the highest number, namely in 2012 and 2013, which was 4 times, which means that the turnover of working capital which was below the standard financial ratio was 6 times.

Keywords:- Working Capital Management.

I. INTRODUCTION

➢ *Background*

Working capital is one of the most important production factors in carrying out the company's operational activities, namely working capital because with working capital all the needs for the production process can be met. The use of working capital by a company in daily operational activities is to spend on its operations in an effort to increase production results in order to obtain maximum profit. The working capital will change according to the company's development. If the company develops, additional working capital is needed to support it.

The size of the company's working capital depends on the type of company. Determining the amount of working capital is very important for the company, because if there is a lack of working capital, the company will experience liquidity problems, namely not being able to pay short-term obligations on time which will result in not maximizing the company's operational activities. Working capital management is the responsibility of every manager or company leader. Managers must supervise working capital so that working capital can be used properly in accordance with established company goals.

➢ *Research Objectives and Benefits*

The purpose of the authors in conducting this research is to determine the management of working capital at PT. Holcim Indonesia, Tbk. Research Benefits, For companies this research is expected to provide information to the management in connection with the analysis of working capital management of PT. Holcim Indonesia, Tbk. For researchers, it is hoped that they can add scientific insight in the field of financial management, especially those related to working capital management.

II. LITERATURE REVIEW

➢ *Definition of Financial Management*

Financial management is a process of corporate financial activities related to efforts to obtain company funds and minimize company costs as well as financial management efforts of a business entity or organization to achieve predetermined financial goals. With the existence of financial management in a company, it will be easy to know how to manage and manage the funds obtained so that the company can get benefits in the future. According to Fahmi (2012: 2) financial management is a science and art that discusses, studies and analyzes how a financial manager uses all the resources owned by a company to raise funds, manage funds, and share funds with the aim of being able to provide profit or prosperity for shareholders and business continuity for the company. According to Sjahrial (2009: 1) financial management is a long-term strategy carried out by companies in increasing funds to meet the desired investment.

Currently, the influence of company financial managers has a broader financial function, according to Harmono (2011: 2) there are three functions of financial management, namely as follows:
1. Investment activities in various assets, investment decisions are one of the most important decisions made in a company, the first step is to determine the total amount of assets that the company needs.
2. The funding function is to study the sources of funds that are on the liabilities side.
3. Determine a funding strategy in order to finance investment activities and company operational activities by taking into account the optimal leverage level, namely observing conditions of market demand and optimal investment portfolios by examining the efficiency and effectiveness of company operations, supported by the management of sources of debt funds, particularly long term debt.

➢ *Definition of Working Capital*

Working capital is the excess of current assets against short-term debt. This excess is known as net working capital. This excess is the amount of current assets that come from long-term debt and equity. Sources of funds can be used to support working capital in carrying out company activities. According to Fahmi (2012: 100) working capital is the investment of a company in short-term assets such as cash, securities, supplies and accounts receivable. According to Djarwanto (2007: 88) working capital is the amount of funds used during the accounting period which is intended to generate short-term income (current income) in accordance with the main purpose of establishing the company. According to Kasmir (2010: 210) working capital is capital used to finance daily company operations, especially those with a short term. According to Riyanto (2010: 57), the important role of working capital in the company states that: "Every company always needs working capital to spend on daily operations, for example to provide plot purchases of raw materials, pay labor wages, employee salaries, and so on. where the money or funds spent is expected to get back again in a short time through the sale of the product. "

➢ *Type of Working Capital*

According to Riyanto (2011: 61), working capital consists of several types, including the following:
1. Permanent Working Capital, namely working capital that must remain with the company to be able to carry out its functions or in other words, working capital that is continuously required for the smooth running of the business.
a. Primary Working Capital is the minimum amount of working capital that a company must have in order to maintain its business continuity.
b. Normal Working Capital is the amount of working capital required to carry out a normal production area. The definition of "normal" here is in a dynamic sense.
2. Variable working capital, namely working capital whose amount changes according to changes in circumstances and working capital is differentiated, among others:
a. Seasonal Working Capital is working capital whose amount changes due to seasonal fluctuations.
b. Cyclical Working Capital is working capital whose amount changes due to fluctuations in the context.
c. Emergency working capital is working capital whose amount changes due to an emergency or sudden situation that cannot be known or predicted in advance (for example, labor strikes, floods, sudden economic breakdown).

Meanwhile, according to Munawir (2010: 119), working capital basically consists of two main parts, namely: 1. A permanent part or a permanent part, namely the minimum amount that must be available so that the company can run smoothly without financial difficulties. 2. The amount of working capital which is variable, the amount depends on seasonal activities and needs outside the usual activities.

➢ *Working Capital Efficiency*

Efficient use of working capital is one of the company's efforts in avoiding waste, so that any funds operated by a company can be directed efficiently and operating funds can return immediately to bring profit to the company. According to Hanafi (2005: 125) The efficiency of working capital is very important, so that the business continuity of a company can be maintained. Furthermore, Djarwanto (2001: 140) explains that to test the efficiency of using working capital, you can use working capital turnover, which is the ratio between sales and working capital.

➢ *Work capital concept*

According to Riyanto, quoted by Fahmi (2012: 105) there are three concepts of working capital, namely:

a. Quantitative Concepts

This concept is based on the quantity of funds that are embedded in the elements of current assets where the funds invested in them will be free again in a short time. Thus, working capital in this concept is the total amount of current assets. Working capital in this sense is often called gross working capital.

b. Qualitative Concepts

Working capital according to this concept is a portion of current assets that can actually be used to finance company operations without disturbing its liquidity, which is the excess of current assets over or against current debt.

c. Functional Concept

This concept is based on the function of funds in generating income. Any funds used in a company are to generate income.

➢ *Factors Affecting Total Working Capital*

According to Jumingan (2011: 69) about the factors that affect the amount of working capital, namely:

a. General nature or type of company

The working capital required by service companies is relatively low because the investment in inventory and receivables is disbursed relatively quickly.

b. Time and cost of production per unit

The amount of working capital needed starts from raw materials or raw materials, finished goods are purchased until the goods are sold to customers.

The longer it takes to produce these goods or obtain an item, the greater the need for working capital required in a company.

c. Terms of purchase and sale

Terms of credit for the purchase of merchandise will affect the size of the working capital in a company. Favorable purchase credit terms will minimize the need for cash to be invested in inventory, on the other hand, if payment must be made after the goods are received, the need for cash to spend trading volume will be greater.

d. Inventory turnover rate

The more often the inventory (goods) is replaced (bought and resold), the lower or less demand for working capital invested in the form of inventory (goods).

e. Accounts receivable turnover rate

The need for working capital also depends on the time period required to convert receivables into cash.

f. Effects of conjunctions

During the prosperous period, company activity increases and companies tend to buy more goods taking advantage of the low price. This means that the company increases its inventory levels.

g. Season influence

There are many companies where sales will be concentrated in only a few months. Seasonally affected firms will need the maximum amount of working capital for a relatively short period.

h. Credit rating from the company

The amount of working capital, in the form of cash, including securities, which the company needs to finance its operations depends on the policy of providing cash.

➤ *Working Capital Management*

Working capital management involves cash, accounts receivable, accounts payable, inventories and short term loans. In order to provide understanding to business actors who wish to deepen their knowledge of how to manage working capital properly, the following discussion will focus more on manufacturing businesses. The definition of working capital is the amount of assets or current assets, such as cash or cash in cash crates and in banks, trade receivables and supplies of raw materials, supporting materials, and finished goods, plus current liabilities or liabilities. Such as trade payables and short term loans. Thus, working capital management is all activities in the context of managing current assets and current liabilities.

The financial ratios related to working capital are as follows:

1. Receivable Turnover is a ratio used to measure how long it takes to collect accounts receivable during a period or how many times the funds invested in these receivables rotate in one period. The higher the ratio indicates that the working capital invested in receivables is lower and of course this condition for the company is getting better. Conversely, if the ratio is lower, it shows that the working capital invested in receivables is higher.

According to Kasmir (2008: 176) the formula used to find Receivable Turnover is: Accounts receivable turnover =

$$\frac{sales}{average \ accounts \ receivable}$$

To calculate the average days of receivable collection, the following formula can be used: Average days of receivables collection =

$$\frac{number \ of \ days \ in \ 1 \ year}{accounts \ receivable \ turnover}$$

2. Inventory Turnover is a ratio used to measure the number of times the funds invested in inventory rotate in one period. It can also be interpreted that inventory turnover is a ratio that shows how many times the number of inventory items is replaced in one year. If the ratio obtained is high, it shows the company's liquid inventory is getting better. Likewise, if the inventory turnover is low, it means that the company is working unproductively and lots of inventory items have accumulated which results in the company's bad condition.

According to Kasmir (2008: 180) the formula used to find Inventory Turnover is as follows: Inventory turnover =

$$\frac{cost \ of \ goods \ sold}{inventory}$$

To find out how many days of inventory are stored in the warehouse, the following formula can be used: Average days of inventory =

$$\frac{number \ of \ days \ in \ 1 \ year}{inventory \ turnover}$$

3. The working capital turnover ratio is a ratio to measure how much working capital rotates during a period. If the turnover of working capital is low, it means that the company is having excess working capital. This is due to low inventory turnover or too large cash balances. Likewise, if it is the turnover of capital high employment, due to high inventory turnover or accounts receivable turnover or cash balances that are too small.

According to Kasmir (2008: 182) the formula used to measure or seek Working Capital Turnover is: Turnover of working capital =

$$\frac{sales}{average \ working \ capital}$$

III. RESEARCH METHODS

The types of data used in this study are qualitative data and quantitative data. The data sources used are primary data and secondary data. Data collection is used in the context of data collection in this study with library research, namely research methods by means of searches to obtain information related to the problems to be researched and field research, namely research methods used done directly by: Interview and Documentation.

➤ *Method of Analysis*

The method of analysis used in this research is descriptive analysis method that investigates the possibility of a causal relationship based on observations of existing data, using financial ratios according to Kasmir (2008: 176) as follows:

1. Receivable Turnover is a ratio used to measure how long it takes to collect accounts receivable during a period or how many times the funds invested in these receivables rotate in one period.
2.
Formula: Accounts receivable turnover =

$$\frac{sales}{average\ accounts\ receivable}$$

To calculate the average days of receivable collection, the following formula can be used: Average days of receivables

$$collection = \frac{number\ of\ days\ in\ 1\ year}{accounts\ receivable\ turnover}$$

2. Inventory Turnover is a ratio used to measure the number of times the funds invested in this inventory rotate in one period.

Formula: Inventory turnover = $\dfrac{cost\ of\ goods\ sold}{inventory}$

To find out how many days the average inventory is stored in the warehouse, the formula can be used: Average days of

$$inventory = \frac{cost\ of\ goods\ sold}{inventory}$$

3. The working capital turnover ratio is a ratio used to measure how much working capital rotates during a period or in one period.

Formula: Turnover of working capital =

$$\frac{Sales}{average\ working\ capital}$$

According to Kasmir (2008: 187) ratio standards are used as guidelines are as follows :

No	Type Ratio	Standard Ratio
1	Receivable Turnover	15 times
2	2 Days Average Accounts Receivable	24 days
3	Inventory Turnover	20 times
4	Days Inventory Average	18 days
5	Working Capital Turnover	6 times

Table 1: Standard Financial Ratios for Industry Average
Source: Kasmir, 2008.

IV. RESEARCH RESULTS AND DISCUSSION

The financial statements of PT. Holcim Indonesia, Tbk during 2011-2013 Tbk as follows:

Financial Data Element	2011	2012	2013
Total Receivables	705.019	864.862	1.019.127
Inventories	570.459	687.087	591.057
Total Current Assets	2.468.172	2.186.797	2.085.055
Sales	7.523.964	9.011.076	9.686.262
Cost of Goods Sold	4.661.085	5.725.467	6.330.938

Table 2: Summary of Financial Statements (balance and profit and loss) PT. Holcim Indonesia, Tbk December 31, 2011-2013 (in million rupiah)
Source: PT. Holcim Indonesia Tbk, 2015.

Based on this table, it can be seen that the total receivables obtained by PT. Holcim Indonesia, Tbk in 2011-2013 has increased every year. Where in 2011 the total receivables amounting to IDR 705,019 in 2012 increased to IDR 864,862 and in 2013 increased to IDR 1,019,127.The amount of inventory in the years 2011-2013 fluctuates every year. Where in 2011 the amount of inventory was Rp. 570,459 in 2012, it increased to Rp. 687,087 and in 2013 it decreased to Rp. 591,057. The number of current assets acquired in 2011-2013 has decreased every year. Where in 2011 the amount of current assets, namely amounting to Rp2,468,172 in 2012 decreased to Rp2,186,797 and in 2013 decreased to Rp2,085,055.

The number of sales obtained in 2011-2013 has increased every year. Where in 2011 the total sales amounted to Rp7,523,964 in 2012 increased to Rp9,011,076 and in 2013 increased to Rp9,686,262. The amount of goods sold in 2011-2013 has increased every year. Where in 2011 the amount of goods sold was IDR 4,661,085, in 2012 it increased to IDR 5,725,467 and in 2013 it increased to IDR 6,330,938.

➢ *Analysis of Working Capital Management*
Based on the discussion in the previous chapter, the analytical method used to measure working capital management at PT. Holcim Indonesia, Tbk includes:

1. Receivable Turnover Ratio

The receivable turnover ratio is a ratio used to measure how long it takes to collect accounts receivable during a period or how many times the funds invested in these receivables rotate in one period. The formula used to calculate receivable turnover is: Accounts receivable turnover = (sales) / (average accounts receivable)

The formula used to calculate the average accounts receivable is as follows:
Average accounts receivable = (opening balance of accounts receivable + ending balance of accounts receivable) / 2

Year	Accounts Receivable		Average Accounts Receivable
	Beginning Balance	Ending Balance	
2011	643.190	705.019	674.104,5
2012	705.019	846.862	775.940,5
2013	846.862	1.019.127	932.994,5

Table 3: Calculation of Average Receivables (in million rupiah)
Source: Processed data, 2015.

Based on the table, it can be seen that in 2011 the average receivable amounted to Rp.674,104.5. In 2012 the average receivables increased to Rp775,940.5 due to an increase in trade receivables of Rp141,843 and in 2013 the average receivables increased to Rp932,994.5 due to an increase in trade receivables of Rp172. 265.

The formula used to calculate the turnover of accounts receivable at PT. Holcim Indonesia, Tbk in 2011-2013 are as follows:

$$\text{Receivable turnover} = \frac{(\text{sales})}{\text{average accounts receivable})}$$

To calculate the average days of receivable collection, a formula can be used, namely:

$$\text{Average days of receivables collection} = \frac{\text{number of days in 1 year (360)}}{\text{Accounts Receivable Turnover}}$$

Year	Sales	Average Accounts	Receivable Turnover	Average Days Receivable
2011	7.523.964	674.104,5	11 times	33 days
2012	9.011.076	775.940,5	12 times	30 days
2013	9.686.262	932.994,5	10 times	36 days

Table 4: Calculation of Accounts Receivable Turnover and Average Days Receivables (in million rupiah)
Source: Processed data, 2015.

Based on the table, it is known that the receivables turnover for 2011 was 11 times with the average days of receivables being 33 days, which indicates that receivables were collected 11 times in one year with a collection period of 33 days. In 2012, accounts receivable turnover increased by 12 times, this was due to an increase in sales of Rp1,487,112 while the average day of accounts receivable decreased by 30 days, this was due to an increase in average receivables of Rp.101,836. In 2013, accounts receivable turnover decreased by 10 times, this was due to an increase in sales of Rp. 675,186. Meanwhile, the average days of accounts receivable increased by 36 days, this was due to the increase in the average receivables of Rp. 157,054. This means that the accounts receivable turnover is still not good because it is below the standard ratio, which is 15 times with an average collection day period of 24 days. This means that the working capital invested in receivables is higher.

2. Inventory Turnover Ratio (Inventory Turnover)

The inventory turnover ratio is the ratio used to find out or measure the number of times the funds invested in this inventory rotate in one period.

The formula for calculating inventory turnover is:

$$\text{Inventory turnover} = \frac{\text{cost of goods sold}}{\text{inventory}}$$

To find out how — many days of inventory are stored in the warehouse, the following formula can be used:

$$\text{Average days of inventory} = \frac{\text{number of days in 1 year (360)}}{\text{inventory turnover})}$$

Year	Cost of Goods Sold	Inventory	Turnover Inventory	Days Average Inventory
2011	4.661.085	570.459	8 times	45 days
2012	5.725.467	687.087	8 times	45 days
2013	6.330.938	591.057	11 times	33 days

Table 5: Calculation of Inventory Turnover and Average Days Inventory (in million rupiah)
Source: Processed data, 2015.

Based on this table, it is known that the inventory turnover for 2011 and 2012 was 8 times with the average day of inventory being 45 days, which indicates that the inventory was replaced 8 times in one year with a period of time being stored in the warehouse for 45 days. Meanwhile, inventory turnover has increased by 11 times, this is due to the increase in cost of goods sold amounting to Rp. 605,471 and the average day of inventory decreased by 33 days, this is due to a decrease in inventory of Rp. 96,030. This means that the working capital invested in inventory is also higher.

3. Ratio of Working Capital Turnover (Working Capital Turnover)

The working capital turnover ratio is a ratio used to measure how much working capital rotates during a period.

If the working capital turnover is higher, the use of the company's working capital is getting better, conversely, if the company uses its working capital properly, the company's ability to generate profits will also increase.

The formula used to measure the turnover of capital work of PT. Holcim Indonesia, Tbk in 2011-2013, namely:

$$\text{Turnover of working capital} = \frac{\text{sales}}{\text{average working capital}}$$

To calculate the average working capital, the formula is used:

$$\text{Average working capital} = \frac{(\text{opening balance of working capital} + \text{ending balance of working capital})}{2}$$

Year	working capital		average working capital
	Beginning Balance	Ending Balance	
2011	2.253.237	2.468.172	2.360.704,5
2012	2.468.172	2.186.797	2.327.484,5
2013	2.186.797	2.085.055	2.135.926

Table 6: Calculation of Average Working Capital (in million rupiah)
Source: Processed data, 2015.

Based on the table, it can be seen that in 2011 the average working capital was IDR 2,360,704.5. In 2012, the average working capital decreased to IDR 2,327,484.5 due to a decrease in working capital of IDR 281,375 and in 2013 the average working capital decreased to IDR 2,135,926 due to a decrease in working capital of IDR 101. 742.

The formula used to calculate working capital turnover at PT. Holcim Indonesia, Tbk in 2011-2013:
Turnover of working capital

$$= \frac{\text{sales}}{\text{average working capital}}$$

Year	Sales	Average working capital	Moda working capital Turnover
2011	7.523.964	2.360.704,5	3 times
2012	9.011.076	2.327.484,5	4 times
2013	9.686.262	2.135.926	4 times

Table 7: Calculation of Working Capital Turnover (in millions rupiah)
Source: Processed data, 2015.

Based on this table, it can be seen that at in 2011 working capital turnover was 3 times which indicates that every Rp. 1.00 of working capital can generate Rp. 3.00 in sales. Meanwhile, in 2012 and 2013 the turnover of working capital increased to 4 times, this was caused by an increase in sales of Rp1,487,112. This means that the modal turnover is still not good because it is below the financial ratio standard, which is 6 times.

As for the comparison of the calculation results of the receivable turnover ratio, inventory turnover ratio, and working capital turnover ratio of PT. Holcim Indonesia, Tbk during 2011-2013 used the financial ratio standards put forward by Kasmir (2008: 187), which are:

Inventory and Working Capital of PT. Holcim Indonesia, Tbk with Ratio Standards

Ratio Type	Year			Standard Ratio
	2011	**2012**	**2013**	
Accounts receivable	11 times	12 times	10 times	15 times
turnover Average	33 times	30 days	36 hari	24 days
days for accounts receivable	8 times	8 times	11 times	20 times
Inventory turnover Average	45 times	45 times	33 times	18 days
Turnover of working capital	3 times	4 times	4 times	6 times

Table 8: Comparative Recapitulation of Accounts Receivable Turnover Analysis,
Source: Processed data, 2015.

The following is an analysis based on table 8 as follows:
1) Accounts receivable turnover in 2011-2013
In 2011, receivable turnover was 11 times. In 2012, accounts receivable turnover increased to 12 times, this was due to an increase in sales of Rp1,487,112. Meanwhile, in 2013, accounts receivable turnover decreased to 10 times, this was due to an increase in sales of Rp. 675,186. This means that the accounts receivable turnover at PT. Holcim Indonesia, Tbk is still not doing well because it is below the standard ratio of 15 times.

2) Average days of accounts receivable, 2011-2013
In 2011, the average days of collection of accounts receivable were 33 days. In 2012, the average days for collection of accounts receivable decreased to 30 days, this was due to the increase in average receivables by Rp101,836. Whereas in 2013 the average days of accounts receivable increased by 36 days, this was due to the increase in the average receivables amounting to Rp157,054. This means that the average days of collection of accounts receivable at PT. Holcim Indonesia, Tbk is still not doing well because it is above the standard ratio of 24 days.

3) Inventory turnover in 2011-2013
In 2011 and 2012, inventory turnover was 8 times. Meanwhile, in 2013 the inventory turnover had increased to 11 times, this was due to an increase in the cost of goods sold amounting to Rp. 605,471. This means that the inventory turnover at PT. Holcim Indonesia, Tbk is still not doing well because it is below the standard ratio of 20 times.

4) Average days of inventory for 2011-2013
In 2011 and 2012, the average day of inventory was 45 days. Meanwhile, in 2013 the average day of inventory decreased by 33 days, this was caused by a decrease in inventory of Rp96,030. This means that the average day of inventory at PT. Holcim Indonesia, Tbk is still not doing well because it is above the prescribed standard ratio of 18 days.

5) Working capital turnover in 2011-2013
In 2011 the working capital turnover at PT. Holcim Indonesia, Tbk 3 times, which shows that every IDR 1.00 working capital can generate IDR 3.00 sales. Meanwhile, in 2012 and 2013 the turnover of working capital increased to 4 times, which indicates that every Rp. 1.00 of working capital can generate Rp. 4.00 sales. This means that the company's working capital turnover is still not good because it is below the financial ratio standard, which is 6 times.

V. CONCLUSION

Based on the results of the analysis and description in the previous chapter, the authors can draw the following conclusions:
1. Based on the calculation of accounts receivable turnover, which reached the highest number in 2012, which was 12 times. This shows that accounts receivable turnover is still not good because it is below the standard financial ratio by 15 times.
2. Based on the calculation of the average days for collection of accounts receivable, which reached the lowest number in 2012 for 30 days. This shows that the average day of receivables collection is also not good because it is above the standard financial ratio for 24 days.
3. Based on the calculation of inventory turnover, which reached the highest figure in 2013, which was 11 times. This shows that inventory turnover is still not good because it is below the standard financial ratio by 20 times.
4. Based on the calculation of the average days of inventory, which reached the lowest number, namely in 2013 for 33 days. This shows that the inventory is also not good because it is above the standard financial ratio for 18 days.
5. Based on the calculation of working capital turnover that reaches

The highest figures were in 2012 and 2013, which was 4 times and the standard financial ratios were 6 times. This shows that the management of working capital at PT. Holcim Indonesia, Tbk has not met the predetermined financial ratio standards. Therefore, the hypothesis proposed by the author is accepted.

REFERENCES

[1]. Djawanto (2007) "Principles of Financial Statement Analysis" Yogyakarta: BPEF.

[2]. Fahmi, Irham. 2012. "Financial Statement Analysis. First printing". Bandung: Alfabeta.

[3]. Harmono (2011) "Financial Management. Third edition" Earth Literacy.

[4]. Jumingan (2011) "Financial Statement Analysis". The fourth print. Jakarta: Earth Literacy.

[5]. Cashmere (2008) "Analysis of Financial Reports". Kencana Prenada Jakarta: Media Group.

[6]. Sjahrial, generous (2009) "Analysis of Financial Statements" Third edition. Jakarta: Mitra Wacana Media.

[7]. Bambang Riyanto (2011) "Dasar-dasar Pembelanjaan Perusahaan" Yogyakarta : BPFE.

[8]. Munawir (2010) "Analisa Laporan Keuangan" Yogyakarta: Liberty.

[9]. Hanafi (2005) "Manajemen Keuangan" Yogyakarta: BPFE.

[10]. Djarwanto Ps (2001) "Pokok – pokok Analisa Laporan Keuangan" Edisi Pertama, Cetakan Kedelapan, BPFE, Yogyakarta.