

## **Effect of Turnover of Cash, Receivables Turnover and Inventory Turnover on Return on Assets (ROA): Case Study in PT Indofood Sukses Makmur TBK**

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**ABSTRACT:** *This study aims to analyze the effect of cash turnover, receivables turnover and inventory turnover of ROA either simultaneously or partially on PT Indofood Sukses Makmur Tbk. The sample used in this research is cash turnover data, inventory turnover turnover and profitability period 2010 to 2017. Sampling technique used is purposive sampling where sampling is done based on consideration of researcher.*

*The results showed that the cash turnover, receivable turnover, and inventory turnover simultaneously affect the ROA. F value of 6,053 F count with a significant level of 0.004 variables cash turnover, receivable turnover and inventory turnover affect the ROA of 47.6%. The cash turnover variable affects ROA partially. The value of t arithmetic 3.080 with significant of 0.05 or less than 5%. The value of r squared by 30.1% means cash rotation variables affect the ROA of 30.1%. Variable receivables turnover affect ROA partially. The value of t arithmetic 3.795 with significant of 0.001 or less than 5%. The value of r squared by 39.6% means that the variable receivable turnover affects ROA of 39.6% while the rest is influenced by other variables that are not included into the model. The inventory turnover variable affects ROA partially. The value of t arithmetic 3.980 with a significant of 0.01 or less than 5%. The quadratic r value of 41.9% means that the inventory turnover variables affect the ROA of 41.9%.*

**KEYWORDS:** *Cash Turnover, Receivable Turnover, Inventory Turnover, Return on Assets*

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### **I. INTRODUCTION**

The Company is one means to improve the state economy, where the company is jointly managed by using management. Good management should be able to take advantage of opportunities in the future and increase the value of the company, so that the company can achieve optimal profit and can survive for survival. The main purpose of the establishment of a company is to maximize the value of the company and improve the welfare of the owners of capital. The objective can be seen from the level of profit earned by the company for a certain period, where in the end the profits will be distributed to investors.

PT Indofood Sukses Makmur Tbk. Bandung Branch was established in May 1992 under the name of PT Karya Pangan Inti Sejati which is one of the branches of PT Sanmaru Food Manufacturing Company Ltd. which is based in Jakarta and started operation in October 1992. At that time the number of employees there are 200 people.

In 1994, there were merger of several subsidiaries within Indofood Group, changing its name to PT Indofood Sukses Makmur Tbk. which is specialized in processing instant noodles. Instant noodle division is the largest division in Indofood and its factories are spread in 15 cities, including Medan, Pekanbaru, Palembang, Tangerang, Lampung, Pontianak, Manado, Semarang, Surabaya, Banjarmasin, Makasar, Cibitung, Jakarta, Bandung and Jambi, namely Solo, Bali and Kendari. It aims to produce enough products to be distributed to the surrounding area of the city where the factory is located, so that the products can be accepted by consumers in a fresh state and help the government program through the distribution of local workers.

One of the goals of PT Indofood Sukses Makmur Tbk is to get maximum profit. To achieve these objectives, management is required with a high level of effectiveness. The measurement of management effectiveness level shown by the profit generated from the sale and from the investment income can be done by

knowing how big the profitability ratio (Wetson and Brigham, 1991). By knowing the profitability ratios, the company can monitor the development of the company from time to time.

In order to maximize profits earned by PT Indofood Sukses Makmur Tbk need to know the factors that have a great influence on the company's earnings. By knowing the influence of each factor on the company's earnings can determine the steps to overcome the problems and minimize the negative impacts that arise.

The bigger a company the greater the working capital used for the business operations. Working capital is the company's investment in short-term assets, ie cash, receivables and inventories. Working capital is a fund used for day-to-day operations and the form of working capital is the thoughts of current assets (Astuti, 2004: 156). In the balance sheet, current assets are presented based on liquidity level and which are included in current assets according to Munawir (2004: 14-16), among others:

1. Cash, or cash that can be used to finance the operations of the company (PT Indofood Sukses Makmur Tbk).
2. Receivables. receivable shall be company's claims to other parties which are stated in the draft or agreement as stipulated in law, this draft shall have more legal power and more secure its settlement.
3. Accounts receivable. Invoices to consumers as a result of the sale of goods or services by credit.
4. Inventory, ie all goods in the preparation of the company until the balance sheet date is still not used.

Working capital is a fund to finance the day-to-day operations of a company, such as purchasing supplies, paying civil servants, or other expenses to be incurred during the operation of the company. The company must have sufficient working capital in order to overcome the financial problems that may arise such as problems pay off short-term liabilities, inflation, losses, scarcity of raw materials inventory or other financial problems. Companies that do not have sufficient working capital certainly can not expand production, so the profit will be reduced, the company can not afford to pay its obligations on time and will experience liquidity problems.

According to Riyanto (2011: 95) that: Cash turnover is the ratio between sales with average cash amount. The higher the cash turnover rate means the faster the cash return goes to the company. Thus, cash will be used again to finance operational activities so as not to disrupt the company's financial condition. Where the average cash and final bank divided by two. The higher the cash flow means the higher the efficiency of its cash usage.

**Table 1. Ratio of Cash Turnover PT. Indofood Sukses Makmur Tbk Year 2010-2017**

No	Year	Quarter / Month			
		I / March	II / June	III/September	IV / December
1	2010	-	2.001	2.074	2.095
2	2011	-	2.401	2.475	2.435
3	2012	2.578	2.654	3.012	323
4	2013	3.329	3.639	3.756	3.885
5	2014	394	454	4.236	7.344
6	2015	8.651	885	887	742
7	2016	7.598	7.006	6.868	6.971
8	2017	6.867	6.304	-	-

Source: Corporate financial report 2010 - 2017 at Idx.id

Based on Table 1 can be seen the ratio of cash turnover in PT Indofood Sukses Makmur Tbk that fluctuate or unstable that will impact on the efficiency and effectiveness of the company's cash usage.

Receivable represents the maturity value arising from the sale of goods or services or from money lending. Receivables include the maturity value arising from activities such as rent and interest. Accounts receivable refers to oral promises to pay derived from the sale of products and services on credit (Subramanyam and Will, 2008: 274). Receivables as part of the working capital component are always in a state of rotation. The period of receivable turnover is influenced by the short duration of the provisions of the time required in the terms of payment. The longer the credit payment terms, the longer the bonds are attached to the receivables and the smaller the turnover rate in one period (Riyanto 1999: 90).The high turnover rate indicates the speed of the funds tied up in the receivable or in other words the fast receivables repaid by the debtor. The higher the turnover rate the faster it becomes cash. In addition, the fast receivables into cash means that cash can be reused and the risk of losses on receivables can be minimized. The receivable turnover can be determined by dividing the number of credit sales over a given period by the average receivable amount. Munawir (2004: 75) suggests that the causes are as follows: Lower sales and increase in receivables, (2). Decrease in receivables and followed by decrease in sales in larger quantities, (3). Increased sales followed by higher receivables, (4). Lower sales with fixed receivables and (5). Rising receivables while sales are unchanged.

**Table 2. Receivable Turnover Ratios PT. IndofoodSukses MakmurTbk Tahun 2010-2017**

No	Year	Quarter / Month			
		I / March	II / June	III/September	IV / December
1	2010	-	621	6.518	3.721
2	2011	-	842	1.179	867
3	2012	249	232	230	177
4	2013	164	152	1.545	1.691
5	2014	1.691	1.691	1.691	872
6	2015	852	855	855	5.196
7	2016	6.741	8.404	8.367	19.239
8	2017	19.216	19.033	-	-

Source: Corporate financial statements for 2010 - 2017

Base on Table 2, it can be seen that the receivable turnover ratio in PT Indofood Sukses Makmur Tbk is also fluctuating or unstable which will affect the efficiency and effectiveness of the company's cash usage. Inventories are also a very important part of working capital as they are used to streamline production activities and meet market demand. As with receivables the inventory level is also highly dependent on sales. Inventory turnover demonstrates the effectiveness of inventory management (Brigham and Weston, 2001: 81). Large inventories enable companies to meet sudden market demands and can minimize risks and costs to be borne by the company (Husnan 1998: 481) the risk of damage to inventories where these risks can make losses for companies such as goods damaged so that the goods are not sold for sale so that the profitability of the company is reduced.

**Table 3. Inventory Turnover Ratio PT. IndofoodSukses MakmurTbk Tahun 2010-2017**

No	Year	Quarter / Month			
		I / March	II / June	III/September	IV / December
1	2010	-	11.392	10.629	14.004
2	2011	-	13.057	23.384	16.962
3	2012	15.803	27.814	19.888	18.083
4	2013	17.359	17.587	14.969	37.905
5	2014	30.779	32.147	34.34	40.688
6	2015	32.467	41.869	37.476	67.739
7	2016	64.155	70.48	70.793	63.031
8	2017	62.66	60.094	-	-

Source: Corporate financial statements for 2010 - 2017

Base on Table 3 it can be seen that inventory turnover ratio in PT Indofood Sukses Makmur Tbk is fluctuating which will affect the efficiency and effectiveness of the company's cash usage. With the theories and events that exist in PT Indofood Sukses Makmur Tbk related to cash, receivables and inventory, the researcher is interested to examine the problem of cash turnover analysis, receivable turnover and inventory turnover on profitability at PT Indofood Sukses Makmur Tbk.

## **II. LITERATURE REVIEW**

### **2.1. Financial Statements**

The financial statements are essentially the result of an accounting process that can be used as a tool to communicate between financial data or a company's activities with interested parties with the data or activities of the enterprise (Munawir 1995: 5).

According to Munawir (1995: 5), the financial statements consist of balance sheets and profit and loss calculations and financial and capital reports of a company on a certain date. While the calculation of income statement shows the results achieved by the company and the cost occurring during a certain period, and a report of changes in capital indicates the source and use or reasons that caused a change in the company's capital. Based on the above two opinions can be concluded that the financial statements is one of the important

information for the company with the parties concerned with the data- data consisting of balance sheet, and calculation of profit and loss as well as information contained in the appendices.

According to Hanafi (2003: 69), financial statements are information that can be used for decision making, ranging from investors or potential investors to the management company itself. Financial reports will provide information on profitability, risk, cash flow timing, all will affect the expectations of the parties concerned.

### **2.1.1. Types of Financial Statements**

According Warsono (2001: 25) there are two kinds of forms of major financial statements produced by a company that is balance sheet and income statement.

#### **a. Balance Sheet**

According Warsono (2001: 25) balance sheet is "financial statements that describe the financial position of an organization at a certain period. The company's balance sheet is based on the basic equation of accounting, that is, assets or assets are equal to disabilities plus stock equities. "

#### **b. Income statement**

According Warsono (2001: 26). "An income statement is a financial statement that describes the results of a business achieved during a certain period." Net income is the difference between total income and total expenses. Revenue measures the inflows of net assets (net of debt) from the sale of goods or services.

Whereas in the opinion of Halim (1994: 20), financial statements can be divided into 2 types, among others:

1. The Balance Sheet represents the company's assets, debt, and capital on the last day of the accounting period.
2. Profit and loss statement. The income statement is a report on the activities of the company during the period of a particular accounting period. The income statement shows the income and operating expenses, interest, taxes, and net profit earned by a company. The profit and loss account is an accounting product designed to show shareholders and creditors whether a company can make a profit.

### **2.1.2. Financial Statement Objectives**

Hanafi (2003: 30) states that the purpose of financial statements are:

- a. Provide useful information to investors, lenders, and other users now or in the future to make investment decisions.
- b. Provides useful information for external users to estimate the amount of time, and uncertainty of cash receipts from interest and from sales or debt obligations.
- c. Provide information to help investors, creditors, and other users to estimate the amount of time, and uncertainty of net cash inflows into the company.

The financial statements are used to determine the development of a company and the company's financial condition basically, the financial statements are the result of the process of recording, classifying and summarizing the events of a financial nature in the exact way as a tool to communicate between financial data or the activity of a company with interested parties The parties concerned about the financial statements and the development of a company are (Munawir, 2004):

The owner of the company the owner of the company whose management is left to the manager. Require financial statements to assess the performance of managers in leading the company and the success of a measured manager is assessed from the profits earned by the company. Based on the results of the analysis of financial statements, if the results achieved by the management company is not satisfactory, then the owner of the company can take an action such as change the management or even sell its shares.

- a. Manager of a company for a manager, financial statements are a means of accountability to the owner of the company for the trust given to him. In addition, financial statements are used to measure the level of costs of various corporate activities, assessing the work of each division that has been authorized and responsible for its tasks and determining new policies or procedures to achieve better results.
- b. The creditor. The creditor before making a decision to give or reject the credit request of a company, it is necessary to first figured out the financial position of the company concerned the financial statements needed to measure the company's ability to repay the debt, interest expense also to know whether the credit will be given enough guarantees of the company.
- c. Investors. Investors have an interest in the financial statements of a company as determining its investment policy whether the company has good prospects and whether the company gets a good profit future profit prospects and future developments are used to determine investment guarantees.
- d. Government. Government concerned in the financial statements of a company to determine the amount of tax to be borne by the company.

- e. Employees. Employees need financial statements to determine the company's ability to provide wages / salaries and social security and assess whether bonuses are reasonably feasible compared to the company's profit levels over a certain period.

### **2.1.3. Financial Performance**

An analysis of a company's financial statements is basically done to see the prospects and risks of the company. The prospect of knowing the level of profit (profitability) while the risk to know the company is experiencing financial difficulties or not. Hanafi and Halim (2005) argue that in order to analyze financial statements, a financial analyst must do several things:

- a. Determining the purpose of financial analysis
- b. Understand the concepts and principles underlying the financial statements and the ratio of financial ratios of those financial statements.
- c. Understand the economic and business conditions that affect the company's business.

Complete financial statements usually include the balance sheet, income statement, statement of changes in financial position which can be presented in various ways eg, cash flow statement, or fund flow statement, other records and reports and explanatory materials that are an integral part of the financial statements. In the Indonesian Accounting Association (IAI, 2007: 3) it is mentioned that the purpose of financial statements is to provide information concerning the financial position, kinetia, and changes in the financial position of a company beneficial to a large number of users in economic decision making. The parties concerned about the financial position and development of a company are: the owners of the company.

Managers of the respective companies, creditors, bankers, investors and governments in which the company is commercially, workers and other parties. Ang (1997) states that the analysis of a company's financial statements is not only done for a certain period only, but comparative analysis is needed (comparison), so it can be seen financial relationship or trend which is significant Analysis financial statements can be divided into three types:

- a. Intracompany basis (internal company comparison to detect any significant corporate financial changes or trends).
- b. Intercompany basis (comparison with other companies that can give an idea of the competitive position of the relevant company)
- c. Industry average (comparison with industry average of same industry with company to be analyzed).

According Harahap (2004: 190) states that the analysis of financial statements as an analysis of financial statements as: Analysis of financial report means describing the outposts of financial statements into smaller units of information and see relationships that are significant or have meaning between one another, whether between quantitative and non-quantitative data with the aim of knowing the deeper financial conditions that are essential in the process of producing the right decision.

Analysis of the widely used financial statements is the analysis of financial ratios. Based on the source of the analysis, the financial ratios can be distinguished:

- a. Internal comparison, comparing the current ratio to the ratio of the past and the future in the same company
- b. External comparison and compare firm ratios with similar firms or with industry averages at the same time.
- c. Broadly speaking there are 4 types of ratios that can be used to assess the financial performance of the company are:
  - 1. Liquidity ratio, which is a ratio showing the relationship between company's cash and other current assets with current liabilities. The liabilities ratio is used to measure a company's ability to meet its financial obligations that must be met or short-term liabilities. Ratios that can be used to measure liquidity, namely current ratio, quick ratio, cash ratio, and net working capital.
  - 2. Activity ratio or also known as efficiency ratio, that is ratio that measure company efficiency in using its assets. Commonly used activity ratios are average collection period, inventory turnover, fixed asset turnover, and total asset turnover, and working capital turnover.
  - 3. The ratio of financial leverage, a ratio that measures how many companies use funds from debt (loans). Commonly used ratios include debt ratio, debt to equity ratio, time interest earned ratio etc.
  - 4. Profitability ratios, ie ratios that indicate a company's ability to profit from its capital use. Profitability ratios are often used, namely gross profit margin, operating profit margin, net profit margin, return on assets, return on investment and return on equity.

## **2.2. Working Capital**

Capital is a very important component in all companies. Companies have different capital requirements depending on the type of business being run. There are three types of business entities, namely trading companies, service companies, and manufacturing companies. The definition of capital according to Brigham (2006: 62) capital is the sum of long-term debt, preferred stock, and ordinary share equity, or perhaps those plus

short-term debt interest. Definition of capital in the Indonesian Accounting Association (IAI, 2007: 9) capital is residual rights to the assets of the company after deducting all liabilities.

Companies always need working capital to meet their daily operational costs understanding working capital according to some experts, among others:

- a. According to Sawir (2005: 129) working capital is the overall current assets owned by the company, or can also be intended as funds that must be available to finance the day-to-day operations of the company.
- b. According to Ingram (2005: 135) working capital is the difference between current assets and current liabilities.
- c. According to Sawir (2005: 129) states working capital is the company's investment in short-term or current assets, including cash, securities, accounts receivable, inventory, and in some companies, prepaid expenses.

According Riyanto (2001: 57) there are three concepts of understanding working capital, namely:

1. Quantitative concepts. This concept is based on the quantity of funds embedded in the elements of current assets, where these assets are assets that once re-circle in the form or assets where funds embedded in it will be free again in a short time. Thus, working capital according to this concept is the sum of total current assets, or often also referred to as gross working capital.
2. Qualitative concept working capital according to this concept is part of current assets that can actually be used to finance the company's operations without disrupting its liquidity, or referred to as net working capital.
3. Functional concept. This concept is based on the function of funds in generating income (income). Any funds used in the company are meant to generate revenue. Basically, the funds owned by the company will all be used to generate profits in accordance with the company's main business, but not all funds used to generate profit this period (current income) there is some funds that will be used to obtain or generate profits in the future come.

From that definition, the elements of working capital are short-term assets consisting of:

- a. **Cash.** Cash is a checking account plus currency. Cash is the most liquid asset, other than that cash is also an asset that does not produce. Cash needed by the company to pay for labor, raw materials, paying off debts, buying fixed assets, paying taxes, paying dividends, and other necessities However the cash does not generate interest so the cash management goal is to minimize the amount of cash at the point where the cash is sufficient to run business activity normally.
- b. **Securities.** Securities is a paper showing the right of ownership to acquire a portion of the prospect or wealth of the company issuing such securities and the conditions under which it exercises the right. According to Bank Indonesia, securities are securities in the form of securities (currency) that the money market has the value of money that can be traded and or the capital market, in addition to cash, the company also requires securities that can be traded as a reserve for cash accounts, if cash owned less of the required, the securities may be sold to meet the cash shortage; therefore, these securities are intended to be the first defense against unexpected operational needs by the enterprise.
- c. **Inventories.** Inventories are assets owned by a company which will then be sold with or without processed first. Inventory itself is an element of the least liquid asset when compared to other current assets. Inventories will incur costs, both fixed and variable costs, these costs include warehouse rental fees, maintenance costs, insurance costs, transportation costs, and so forth. In addition to costs, inventory will also pose a high enough risk of loss, risk of damage, etc.
- d. **Accounts Receivable.** A receivable shall be the right to receive a substantial amount of cash in the future due to an event that has been done in the past. Receivables arise because of sales on credit, lending, porsecots in the purchase contract, and others.

Based on these various conclusions, it can be concluded that working capital is an investment company in short-term assets or current assets.

### **2.2.1. Types of Working Capital**

Working capital can be classified into 2 types, namely as follows:

- a. Permanent working capital, ie working capital that must remain in the company to be able to perform its functions. This permanent working capital can be distinguished in:
  1. Primary working capital, namely the minimum amount of working capital that must exist in the company to ensure the continuity of its business
  2. Normal working capital, ie the amount of working capital required to carry out normal production area.
- b. Working capital variable, ie working capital that the number of changes in accordance with changes in circumstances and working capital is distinguished between:
  1. Seasonal capital, ie working capital whose work amount is changing due to seasonal fluctuations,
  2. Cyclical working capital, ie the amount of working capital that varies due to fluctuations in the conjunction,



3. Emergency kits, ie working capital that varies due to unforeseen emergencies (eg strikes in the form of floods, sudden economic changes in the economy).

Controlling the right amount of working capital will ensure the operation of the company efficiently and economically. If the working capital is too large, the funds embedded in working capital exceed the need, so the funds are idle, but if the amount of working capital is too small or less, then the company will be less able to meet subscription demand.

### **2.2.2. Working Capital Function**

Some functions of working capital include the following:

- a. Working capital accommodates the possibility of adverse effects caused by impairment of current assets such as impairment of doubtful and non-recoverable receivables or decline in value of inventories,
- b. Adequate working capital allows the company to pay all current debts on time,
- c. Adequate working capital allows the company's "corporate credit standing" ie third party valuations, such as banks and creditors to be eligible for credit maintenance.

### **2.2.3. Source of Working Capital**

If the source of working capital is greater than the use, there is an increase in working capital. Conversely, if the use is smaller, it means a decrease in working capital. The sources of ape capital that will increase working capital are:

- a. The increase in the capital sector, either derived from profit or additional share capital,
- b. There is a reduction or decrease in fixed assets due to the sale of fixed assets or through the depreciation process.
- c. There is the addition of long-term debt, either in the form of bonds or other long-term debt.

The use of working capital resulting in the decrease of working capital is as follows:

- a. Reduced own capital due to loss, as well as privacy retrieval by the owner of the company.
- b. Payment of long-term debt.
- c. The existence of the addition or purchase of fixed assets.

### **2.2.4. Factors Affecting Working Capital**

The determination of working capital that is considered sufficient for a company is influenced by several factors as follows:

- a. Nature and type of company. Working capital of a company's services is relatively smaller than the capital requirement of an industrial company. The service company usually has or must invest its capital mostly on fixed assets used to provide services or services to the public. Instead the industrial company must make substantial investments in current assets so that the company does not experience difficulties in its daily operations. Companies that produce goods require relatively larger working capital than trading companies.
- b. The time taken to produce or obtain the goods to be sold and the price per unit of the item. The longer the time required to produce the goods or to obtain the goods, the greater the working capital or cash needed.
- c. Terms of credit terms of purchase of materials or merchandise. If at the time of purchase is profitable, the less money that must be provided to be invested in the supply of materials or merchandise.
- d. Terms of sale of credit lanak given by the company to the buyers will result in the greater the amount of working capital to be invested in receivables, then this is the need for the management of receivables so that the rotation is more quickly due to maturity.
- e. Inventory turnover rate. The higher the inventory turnover the lower the working capital required.

### **2.2.5. Working Capital Management**

According to Sawir (2005: 133) working capital management is an activity that includes all the functions of management of current assets and short-term liabilities of the company. Working capital management is very important because first the current assets of manufacturing companies mngembangkan more than half the total assets, while for distribution companies the number could be even greater. The purpose of working capital management is to manage current assets and current liabilities so as to obtain net working capital is feasible and ensure the level of profitability of the company.

The targets to be achieved from working capital management are:

- a. Maximize the value of a company by managing its current assets so that the marginal return of investment is equal to or greater than the cost of capital used to finance the assets,
- b. Minimize the cost of working capital used to finance current assets,
- c. Supervision of cash flows in current assets and availability of debt sources, so that the company can always meet its financial obligations when it matures.

According to Horne and Wachowicz (2005: 309) good working capital management is based on two fundamental decision issues, the issue is the determination of investment level of current assets and funding mix:

- a. The level of optimal current assets investment in determining the amount or level of current assets management should consider the advantages and disadvantages between profitability and risk. For each level of output, a company can have a number of different levels of current assets. The greater the output, the greater the need for investment in current assets to support output or sales.
- b. Appropriate mix of short- and long-term funding used to support investments in current assets. The way the company's assets are funded involves profit and loss between risk and profitability. In line with the growth of current assets, business debt and payments will tend to rise, so some finance the construction of assets. Over time, it can be estimated to pay more interest for long-term debt than for short-term loans, which are extended at maturity. Continuous use of short-term debt will result in higher profits because debt will be repaid during periods that do not even require it.

#### **2.2.6. The Importance of Working Capital**

Controlling the right amount of working capital will ensure the continuity of operations of the company efficiently and economically. When the working capital is too large, the funds embedded in working capital exceed the need, resulting in idle funds, because the funds can actually be used for other purposes in order to increase profits. The company lacks working capital to expand its sales and production, it is likely to lose revenue and profits. Companies that do not have sufficient working capital, can not pay short-term obligations on time and will face liquidity problems. Working capital that must be available in the company should be sufficient in the sense of having to be able to finance the expenses or operations of the daily company. Adequate working capital will provide several other advantages, among others:

- a. Protecting companies against the crisis of working capital due to the declining value of current assets,
- b. Allow to pay all obligations on time,
- c. Ensuring that the company's credit standing is getting bigger and allowing the company to be able to face the danger hazard or financial difficulties that may occur,
- d. It is possible to have a sufficient supply to serve its customers,
- e. Allowing for the company to provide more favorable credit terms to its customers,
- f. Allows for companies to operate more efficiently because there is no difficulty in acquiring goods or services needed.

#### **2.2.7. Working Capital Turnover**

Between sales with working capital there is a close relationship, when the volume of sales rose inventory and receivable investment also increased, this means also increase working capital or cash. To test the efficiency of the use of working capital, the analyzer uses cash turnover, receivable turnover and inventory turnover.

##### **a. Cash Turnover**

Cash is the working capital element with the highest level of liquidity and can be used to have the desired goods and services. The amount of cash held by a company can be attributed to the sale, it describes the cash turnover. Cash turnover shows the level of efficient use of cash. The efficient use of cash means companies have the opportunity to make greater investment in fixed investment that can menin income (Muslich 2007: 98). With increased revenue can increase the profitability of a company. But too high a cash turnover can cause the company to experience cash shortage (Muslich 2007: 98). If the company is short of cash money, then to meet it can be overcome with debt. But in debt there are interest, where the debt interest will be able to reduce the profitability of a company. This is in accordance with research conducted by (Siswantini, 2006). According to Bambang, cash turnover is the ratio between average cash sales. The amount of cash with the amount can also be related to the amount of sales or sales. The comparison between sales with the average cash amount describes the level of cash turnover. The higher the rate of cash turnover means the quick return of cash to the company so that cash will be reused to finance the operational activities so as not to disrupt the company's financial condition. Where the average cash and bank can be calculated from the initial cash and bank balance plus cash balance and final bank divided by two. The higher the cash flow means the higher the efficiency of its cash use.

##### **b. Working Capital Turnover on Accounts Receivable**

As described in the inventory theory that the high turnover inventory has a direct effect on the amount of capital invested in inventory. The higher the rotation rate, the faster the rotation rate, which means the shorter the time related to capital in the inventory, so to meet the volume of sales or cost of goods sold with a certain turn overnya required a smaller amount of capital. The statement becomes a dilemmatic problem, especially in the midst of the tight competition nowadays, whereby suppressing the inventory numbers of firms taking policy to make sales on credit (accounts receivable), this policy is very risky if the decision to make sales on



credit is not analyzed carefully In order to increase the volume of sales, many companies sell their products with credit. Sales of credit immediately result in cash receipts but incurring accounts receivable. Only on maturity day is the cash flow coming from the collection of the receivables. Under normal circumstances and where general sales are made with credit, accounts receivable have a higher level of liquidity than inventory, where turnover from receivables to cash requires one step only. Receivables management is very important for companies that sell their products with credit. The management of receivables mainly concerns the issue of controlling the amount of receivables, and evaluation of the strategies set by the company.

William, Alexander and Bailey (1995: 333) suggests that the factors that affect the size of the investment in receivables can be mentioned as follows:

1. Credit sales volume  
The greater the proportion of credit sales of total sales increases the amount of investment in receivables. The greater the amount of receivables means the greater the number of risks but at the same time also enlarge its "profitability".
2. Terms of payment of credit sales  
Terms of payment of credit sales can be straightforward or soft. If the firm establishes a strict payment terms it means that the company has prioritized credit addressability rather than profitability considerations. Strict conditions such as in the form of short payment timeout payment, heavy interest imposition on the payment of late receivables.  
Provisions on credit limitations in credit sales, a company may set a ceiling or credit limit on its subscriptions. The higher the ceiling set for each subscription means the greater the money invested in the receivables. Similarly the provisions on who can credit. The more selective the creditable subscribers will reduce the amount of investment in receivables. Thus, credit restrictions here are both quantitative and qualitative.
3. Policy in collecting receivables  
The policy of collecting receivables can be done actively or passively. Companies that actively enforce policies in receivables will have greater expenses for withdrawals to finance the collection activities of those receivables compared to other companies running passive policies.
4. The custom of paying from subscriptions  
There are some subscriptions that have a habit to pay with cash discount and some others who do not use the opportunity. The difference in the mode of payment depends on how they judge which is more favorable between the two alternatives.

Munawir (2002: 9) said that credit risk is unpaid credit or receivable has been given to the customer. Before the company decided to approve the request or addition of credit by the subscriber needs to be evaluated credit risk from the subscription. To assess credit risk, consider the company should be various factors that determine the size of the credit. In general, the Bank or company in conducting credit risk assessment is to pay attention to 5 (five) "c" (Chalimi 2015: 63), namely:

1. Character indicates the possibility or profitability of the subscription to honestly strive to fulfill its obligations. This factor is very important because every credit transaction contains the ability to pay.
2. Capacity is a subjective opinion about the ability of the subscription. This is measured by a record or past time record, supplemented by physical observation on assets owned by the debtor
3. Capital is the financial position of the company in general where it is shown by the analysis of financial ratios are specifically emphasized on tangible net worth of the company.
4. Collateral, is a debtor asset that is said or used as security for the credit security provided to the debtor.
5. Conditions, is the direct influence of the general economic trend on the company concerned or the specific developments in a particular economic field may have an effect on the borrower's ability to fulfill his obligations.

#### c. Working Capital Turnover on Inventory

For industrial companies and trading companies, inventory holds a very important role in supporting the existence of the company inventory in this case about the materials to be processed into a production for industrial companies is a determinant in the smoothness of production it is necessary to have an adequate inventory, because the impulse to have that inventory, does not mean the company provides for the amount. Indeed, having high inventories, such as for finished goods, will minimize the likelihood that companies will not be able to meet subscribers' demands. But besides it will cause too much investment in the inventory, and also the possibility of the damaged material becomes greater, because that is the need to offset the losses due to having inventory, and the benefits to be gained.

Bigel (1990: 90) says that inventory can take the form of raw materials for processing. Semi-finished goods and ready-to-sell goods so that actual supply has a very important function for industrial companies. Furthermore, according to Munandar (991: 56) that the meaning of inventory is the inventory of goods that become the object of the company's main business, for the company trade in goods in the form of

merchandise inventory, while for companies producing (industry) inventory of supplies, inventory of goods being processed and inventory of finished goods.

In addition to the definition of inventory, inventories can be classified on raw material inventory, working process in and finished good inventory. It means the holding of inventory ranging from raw material form to finished goods form ready sold are:

1. Maintain and maintain the stability of the company's operations to ensure the smooth flow of production.
2. Avoiding the risk of delay in the arrival of raw materials that the company needs in the production of goods.
3. To guarantee the optimal use of machine machines in accordance with predetermined production plans.

The investment problem in inventory is an active expense, as do investments in other assets. The problem of determining the amount of investment or al capital in inventory has a direct effect on corporate profits. Mistakes in determining the amount of investment in inventory will reduce the profit of the company. The presence of investment in inventory that is too large in comparison with the needs of interest expenses, storage and maintenance costs will increase the warehouse, the possibility of loss due to damage, decline in quality, and obsolescence, so that all this will reduce profits company. Similarly vice versa, there is an investment to gain profit, the company can not work with optimal production, because the company does not define capacity. This will heighten the average cost of production which will ultimately reduce the profit earned by the company.

Inventory is an inventory of goods that is always in perpu both in industrial companies and trading companies. With efficient and effective inventory turnover, it will be possible for the company to make a profit (cash to reinvest in inventory) Efficiency and effectiveness of inventory turns should always be considered, through analysis of inventory turnover rate inventory turnover is ratio.

### **3.1. Return on Assets (ROA)**

Return on Assets (ROA) is part of the profitability ratio in analyzing the financial statements of the company's financial performance report. Profitability is the ability of the company to obtain and profit capital in relation to sales, total assets themselves (Sartono, 2010: 122) "For the company the problem of profitability is important, for the leadership of the company, profitability is used as a benchmark succeed or not the company he leads, the higher the company's profitability, there is an opportunity to increase employee salaries."

According to some experts understanding profitability, among others:

1. According to the ess with which management has employed the total assets and the assets as recorded on the balance sheet,
2. According to Greuning (2005: 29) profitability is an indication of how a company's profit margins relate to sales, average capital, and average equity shares.

Based on some understanding from previous experts it can be concluded that profitability is the company's ability to generate profit.

There are several ways to measure the level of profitability of a company:

1. Gross profit margin (GPM). This measurement is a measure of the percentage of each sale after the firm paid the cost of goods sold. The higher the gross profit margin the better.
2. Operating profit margin (OPM). This measurement is a measure of the percentage of any residual proceeds after all other costs and expenses are deducted except for interest and taxes.
3. Net profit margin (NPM). This measurement is a measure to measure the percentage of corporate profits after deducting all expenses from expenses including interest and taxes.
4. Return on assets (RoA). This measurement is a measure of management effectiveness in generating profits with available assets.
5. Return on equity (ROE). This measurement is the size of the returns the owner receives on the investment in the company.

In this study profitability will be measured by using return on assets (ROA). High profitability will be able to support operational activities maximally. High and low profitability is influenced by many factors such as working capital. In conducting its operational activities every company will membututkan potential resources, one of which is capital, both working capital such as cash, accounts receivable, inventory and fixed capital such as fixed assets. Capital is a major problem that will support the company's operational activities in order to achieve its goals (Bramasto, 2008). Measurement of the company's financial performance with the overall ROA of its assets to generate profit. ROA (Return on Asset) is the ratio of net profit after tax to assess how much the return of assets owned by the company. Negative ROA due to corporate profits in negative conditions as well or loss. This shows the ability of the capital.

Return on Assets (ROA) is part of the profitability ratio in analyzing the financial statements of the company's financial performance report. Understanding ROA according to some experts are:

1. According to (Hanafi 2000: 83) Return on Assets is a ratio that measures a company's ability to generate profits by using the total assets owned by the company after adjusting for costs to mark the asset.
2. According to Jumingan (2006: 41) "the ratio of operating income to operating assets shows the profits derived from capital investment in assets without relying on the source from which the capital originated (overall capital).

Based on the above understanding can be concluded that the return on assets is the ability of companies in generating ROA profit shows the efficiency of the company in managing all its assets to earn revenue.

Return on assets (ROA) is one of the profitability ratios that can the company's ability in generating profit from assets that measure used. Return on assets is the ratio between earnings before interest and tax (EBm with total assets owned by the company) Return on assets (ROA) is positive indicate that from total assets used to operate, company able to give profit for company instead if return on assets the negative shows that the total assets used, the company get a loss So if a company has a high ROA then the company has a big chance in increasing growth But if the total assets used companies do not provide profits then the company will lose and will hamper growth.

Both profit margin and total asset turnover can not provide adequate measurement of the overall effectiveness of the company. Profit margins do not take into account the use of assets, while total asset turnover does not take into account profitability in sales. Return on asset ratio or return on investment overcomes both weaknesses. Increased corporate capabilities can occur if there is an increase in profit margin or an increase in total assets over or both. Two companies with different profit margins and total asset turnover may have the same ROA ratio (Horne 2005: 225).

### **3.1.1. Advantages of ROA**

- a. ROA is a comprehensive measurement whereby all affect the financial statements reflected in this ratio.
- b. ROA is easy to calculate, understand, and mean in absolute value.
- c. ROA is a denominator applicable to any unit of organization responsible for profitability and business units.

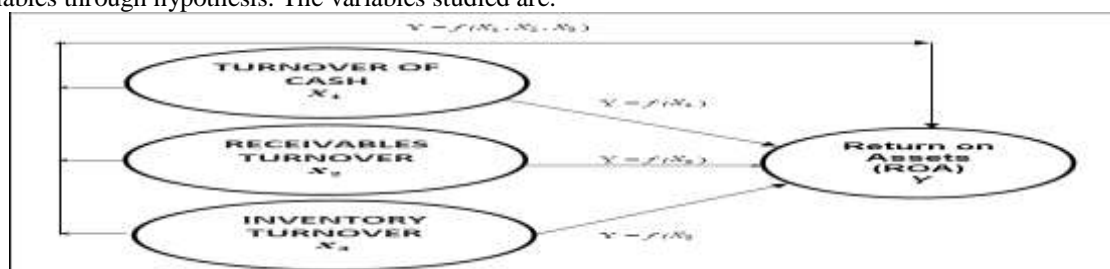
### **3.1.2. Weakness of ROA**

- a. Measuring performance using ROA makes division managers have a tendency to skip projects that lower ROA divisions, even though they can actually improve overall corporate profits.
- b. Management also tends to focus on short-term goals rather than long-term goals.
- c. A project in ROA can improve short-term goals but the project has negative consequences in the long run. In the form of disconnection of several salespeople, reduction of marketing budget, and the relatively low cost of raw materials thereby decreasing product quality in the long run, this has negative consequences in the long term.

## **III. RESEARCH METHODS**

### **3.1 Research Design**

This research using explanatory analysis approach means that every variable that diketangahkan on hypothesis observed by testing causal relationship of independent variable to dependent variable. Chalimi (2015: 8) argues that, explanatory survey is a survey used to explain the clausal relationship between two variables through hypothesis. The variables studied are:



**Figure 1. Research Design**

### **3.2 Population and Sample**

Population is a generalization region consisting of objects / subjects that have a certain quantity and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2005). While the sample is the pull of some populations to represent the entire population, (Surakhmad, 1990).

The study sample takes the sense by sugiyono in his book "statistics for research" is part of the number and character possessed by the population. Given the size of the population that may be large enough, the research needs to do a sample drawing by taking some of the population. The sampling technique used is purposive sampling where sampling is done based on individual consideration or consideration of the researcher. The

sample used by the authors in this research is the cash turnover data, inventory turnover turn over and profitability period 2010 to 2017.

### 3.3 Data Collection Techniques

To obtain a concrete and objective data must be done research on the problems studied, while the steps that researchers traveled in data collection are:

- a. Primary data: Data obtained directly from the object of research. In this case the primary data obtained from the field research data collection method is done by direct research on the object of research in question.
- b. Secondary data: Data obtained indirectly from the object of research. In this case the secondary data obtained from the library research data collection method is done by studying and understanding the books literatur the work of authors who can be justified theoretical basis.

### 3.4 Data Processing Techniques

Stages of data management in this study are classical assumption test (BLUE) with regression such as linearity test, heteroskedasitas test, normalis test, multicollinearity test and auto correlation and descriptive statistic search are mean, median, mode, standard deviation and range.

## IV. RESULTS AND DISCUSSION

### 4.1. Regression Analysis Results

#### 4.1.1. Analysis of Results Variable Ratio Cash Turnover

The cash rollover ratio is obtained from the share of net sales by cash value, including money in the bank. The magnitude of the development of net sales can be seen in Table 4 as follows:

**Table 4. Net Sales Development In Billion**

Quarter	Net Sales	Growth
I – 2011	4.707.732	-
II – 2011	9.422.790	1,00
III – 2011	14.450.070	0,53
IV – 2011	19.367.155	0,34
I – 2012	5.286.301	-0,73
II – 2012	10.918.798	1,06
III – 2012	16.227.848	0,48
IV – 2012	21.574.792	0,33
I – 2013	6.056.697	-0,72
II – 2013	12.507.386	1,07
III – 2013	18.876.795	0,51
IV – 2013	25.094.681	0,33
I – 2014	7.355.089	-0,71
II – 2014	15.522.285	1,11
III – 2014	22.783.920	0,47
IV – 2014	30.022.463	0,32
I – 2015	7.967.734	-0,73
II – 2015	16.551.247	1,08
III – 2015	24.095.759	0,46
IV – 2015	31.741.094	0,32
I – 2016	8.922.132	-0,72
II – 2016	18.175.105	1,04
III – 2016	26.471.260	0,46
IV – 2016	34.466.069	0,30

Source: Corporate Data Processed in 2017

Based on Table 4 it can be explained that at the beginning of the sales period of IDR 4,707 billion, the company's sales increased 100% in the first quarter of 2011. In the last quarter of the fourth quarter or 2016 data in 2016 the company's sales to IDR 34,466,069 billion up 30%. To calculate the cash turnover ratio is also required data on cash owned by the company. The amount of cash owned by the company can be seen in Table 5 as follows:

**Table 5. Company Cash Development In Billion**

Quarter	Value Cash& Bank	Growth
I – 2011	4.995.432	-
II – 2011	3.938.585	-0,21
III – 2011	3.826.950	-0,03
IV – 2011	4.420.644	0,16
I – 2012	4.995.432	0,13
II – 2012	5.383.840	0,08
III – 2012	4.859.382	-0,10
IV – 2012	5.487.171	0,13
I – 2013	5.648.029	0,03
II – 2013	6.189.807	0,09
III – 2013	5.460.848	-0,12
IV – 2013	5.526.173	0,01
I – 2014	6.316.492	0,14
II – 2014	6.784.302	0,07
III – 2014	6.271.561	-0,08
IV – 2014	7.342.986	0,17
I – 2015	7.536.248	0,03
II – 2015	6.234.520	-0,17
III – 2015	6.126.299	-0,02
IV – 2015	7.657.510	0,25
I – 2016	7.991.005	0,04
II – 2016	6.997.652	-0,12
III – 2016	7.330.776	0,05
IV – 2016	8.371.980	0,14

Source: Corporate Data Processed in 2017

Based on the above data it is known that the average cash value for 24 periods is 3%. In the first quarter of 2011, the value of cash and bank amounted to IDR 4,995,432 billion. While the amount of cash and bank in the fourth quarter in 2016 amounted to IDR 8,371,980 billion.

Based on the above data can be calculated the amount of cash rollover ratio in Table 6 as follows:

**Table 6. Cash Turnover Ratio In Billion**

Quarter	Net Sales	Value Cash& Bank	RPK
I – 2011	4.707.732	4.995.432	0,94
II – 2011	9.422.790	3.938.585	2,39
III – 2011	14.450.070	3.826.950	3,38
IV – 2011	19.367.155	4.420.644	4,38
I – 2012	5.286.301	4.995.432	1,06
II – 2012	10.918.798	5.383.840	2,03
III – 2012	16.227.848	4.859.382	3,34
IV – 2012	21.574.792	5.487.171	3,93
I – 2013	6.056.697	5.648.029	1,07
II – 2013	12.507.386	6.189.807	2,02
III – 2013	18.876.795	5.460.848	3,46
IV – 2013	25.094.681	5.526.173	0,45
I – 2014	7.355.089	6.316.492	1,16
II – 2014	15.522.285	6.784.302	2,29
III – 2014	22.783.920	6.271.561	3,63
IV – 2014	30.022.463	7.342.986	4,09
I – 2015	7.967.734	7.536.248	1,06
II – 2015	16.551.247	6.234.520	2,65
III – 2015	24.095.759	6.126.299	3,93
IV – 2015	31.741.094	7.657.510	4,15
I – 2016	8.922.132	7.991.005	1,12
II – 2016	18.175.105	6.997.652	2,60
III – 2016	26.471.260	7.330.776	3,61
IV – 2016	34.466.069	8.371.980	4,12

Source: Corporate Data Processed in 2017

Based on Table 6 it can be seen that in the first quarter of 2011 the amount of cash turnover ratio was 0.94 while at the end of the study period that is the fourth quarter of 2016 amounted to 4.12.



**4.1.2. Analysis of Variable Results Receivable Turnover Ratios**

The receivable turnover ratio is derived from the comparison between credit sales with average receivables. The data is provided based on the same period as the previous data. The development of credit sales in the same period can be seen in the following table:

**Table 7. Development of Credit Sales In Billion**

Quarter	Credit Sales	Growth
I – 2011	4.707.732	
II – 2011	9.422.790	1,00
III – 2011	14.450.070	0,53
IV – 2011	19.367.155	0,34
I – 2012	5.286.301	-0,73
II – 2012	10.918.798	1,06
III – 2012	16.227.848	0,48
IV – 2012	21.574.792	0,33
I – 2013	6.056.697	-0,72
II – 2013	12.507.386	1,07
III – 2013	18.876.795	0,51
IV – 2013	25.094.681	0,33
I – 2014	7.355.089	-0,71
II – 2014	15.522.285	1,11
III – 2014	22.783.920	0,47
IV – 2014	30.022.463	0,32
I – 2015	7.967.734	-0,73
II – 2015	16.551.247	1,08
III – 2015	24.095.759	0,46
IV – 2015	31.741.094	0,32
I – 2016	8.922.132	-0,72
II – 2016	18.175.105	1,04
III – 2016	26.471.260	0,46
IV – 2016	34.466.069	0,30

Source: Corporate Data Processed in 2017

Based on Table 7 it is known that credit sales growth generally increases. In the second quarter of 2011 credit sales growth increased by 100%. In the next year decreased to 53%. At the end of the period declined again to 30%. Average loan sales growth of 33%. Another variable to calculate the receivable turnover ratio is the amount of the company's receivables. The amount of corporate receivables can be seen in Table 8 as follows:

**Table 8. Development of Accounts Receivable In Billion**

Quarter	Average Receivables	Growth
I – 2011	2.261.196	
II – 2011	2.290.187	0,01
III – 2011	2.313.632	0,01
IV – 2011	2.260.329	-0,02
I – 2012	2.284.495	0,01
II – 2012	2.531.963	0,10
III – 2012	2.500.052	-0,01
IV – 2012	2.228.600	-0,10
I – 2013	2.457.969	0,10
II – 2013	3.006.122	0,22
III – 2013	3.026.325	0,007
IV – 2013	2.454.553	-0,19
I – 2014	2.973.739	0,21
II – 2014	4.073.538	0,37
III – 2014	3.604.666	-0,12
IV – 2014	2.695.540	-0,25
I – 2015	3.394.082	0,26
II – 2015	4.165.737	0,23
III – 2015	4.154.460	-0,003
IV – 2015	3.197.834	-0,23
I – 2016	3.733.755	0,17
II – 2016	4.814.329	0,29
III – 2016	4.886.605	0,15
IV – 2016	3.721.206	-0,24

Source: Corporate Data Processed in 2017

Based on Table 8 it is known that at the beginning of the period, the average receivable of IDR 2,261,196 billion with the growth rate of receivables is 1%. At the end of the period in the fourth quarter of 2016, the average receivables amounted to IDR 3,721,206 billion and the average growth of receivables decreased by 24%.

**Table 9. Growth of Receivables Turnover Ratio In Billion**

Quarter	Credit Sales	Average Receivables	RPPI
I – 2011	4.707.732	2.261.196	2,08
II – 2011	9.422.790	2.290.187	4,11
III – 2011	14.450.070	2.313.632	6,25
IV – 2011	19.367.155	2.260.329	8,57
I – 2012	5.286.301	2.284.495	2,31
II – 2012	10.918.798	2.531.963	4,31
III – 2012	16.227.848	2.500.052	6,49
IV – 2012	21.574.792	2.228.600	9,68
I – 2013	6.056.697	2.457.969	2,46
II – 2013	12.507.386	3.006.122	4,16
III – 2013	18.876.795	3.026.325	6,24
IV – 2013	25.094.681	2.454.553	10,22
I – 2014	7.355.089	2.973.739	2,47
II – 2014	15.522.285	4.073.538	3,81
III – 2014	22.783.920	3.604.666	6,32
IV – 2014	30.022.463	2.695.540	11,14
I – 2015	7.967.734	3.394.082	2,35
II – 2015	16.551.247	4.165.737	3,97
III – 2015	24.095.759	4.154.460	5,80
IV – 2015	31.741.094	3.197.834	9,93
I – 2016	8.922.132	3.733.755	2,39
II – 2016	18.175.105	4.814.329	3,78
III – 2016	26.471.260	4.886.605	5,42
IV – 2016	34.466.069	3.721.206	9,26

Source: Corporate Data Processed in 2017

Based on Table 9 it can be seen that the average receivable turnover fluctuates from year to year. At the beginning of the year the ratio was 208% and at the end of the year at 9.26%.

**4.1.3. Analysis of Results Variable Ratios Inventory Turnover**

The inventory turnover ratio is derived from the comparison between cost of goods sold and the average inventory. The data is provided based on the same period as the previous data. The development of cost of goods sold during the same period can be seen in the following table.

**Table 10. Development of Cost of Goods Sold In Billion**

Quarter	Cost of Goods Sold	Growth
I – 2011	3.502.898	
II – 2011	6.997.846	0,99
III – 2011	10.690.252	0,53
IV – 2011	14.335.896	0,34
I – 2012	3.885.872	-0,73
II – 2012	8.093.182	1,08
III – 2012	11.916.708	0,47
IV – 2012	15.796.183	0,33
I – 2013	4.441.994	-0,72
II – 2013	9.212.372	1,07
III – 2013	13.970.367	0,52
IV – 2013	18.668.990	0,34
I – 2014	5.505.665	-0,71
II – 2014	11.554.846	1,10
III – 2014	16.722.847	0,45
IV – 2014	21.962.609	0,31
I – 2015	5.616.867	-0,74
II – 2015	11.474.501	1,04
III – 2015	16.703.751	0,46
IV – 2015	22.121.957	0,32
I – 2016	6.113.299	-0,72
II – 2016	12.415.221	1,03
III – 2016	18.011.198	0,45
IV – 2016	23.606.755	0,31

Source: Corporate Data Processed in 2017

Based on Table 10 it is known that at the beginning of the growth period, the cost of sales shows an increasing number of 99%. At the end of the growth period it becomes 31%. To calculate the inventory receivables turnover ratio, the average inventory data is also required. Development of average inventory can be seen in the following table:

**Table 11. Development of Average Stocks**

Quarter	Average Stocks	Growth
I – 2011	1.620.314	
II – 2011	1.639.349	0,01
III – 2011	1.694.188	0,03
IV – 2011	1.629.883	-0,04
I – 2012	1.680.003	0,03
II – 2012	1.535.011	-0,09
III – 2012	1.624.966	0,06
IV – 2012	1.812.887	0,12
I – 2013	1.917.343	0,06
II – 2013	2.091.259	0,09
III – 2013	2.343.507	0,12
IV – 2013	2.868.722	0,22
I – 2014	2.817.933	-0,02
II – 2014	2.556.866	-0,09
III – 2014	2.596.730	0,02
IV – 2014	2.821.618	0,09
I – 2015	2.710.629	-0,04
II – 2015	2.806.482	0,04
III – 2015	2.560.249	-0,09
IV – 2015	2.546.835	-0,005
I – 2016	2.622.494	0,03
II – 2016	2.667.168	0,02
III – 2016	2.598.394	-0,03
IV – 2016	3.109.916	0,20

Source: Corporate Data Processed in 2017

From these two data can be calculated the ratio of inventory turnover in Table 12 as follows:

**Table 12. Inventory Turnover Ratio In Billion**

Quarter	Cost of Goods Sold	Average Stocks	RPPE
I – 2011	3.502.898	1.620.314	1,33
II – 2011	6.997.846	1.639.349	4,27
III – 2011	10.690.252	1.694.188	6,31
IV – 2011	14.335.896	1.629.883	8,80
I – 2012	3.885.872	1.680.003	2,31
II – 2012	8.093.182	1.535.011	5,27
III – 2012	11.916.708	1.624.966	7,33
IV – 2012	15.796.183	1.812.887	8,71
I – 2013	4.441.994	1.917.343	2,32
II – 2013	9.212.372	2.091.259	4,40
III – 2013	13.970.367	2.343.507	5,96
IV – 2013	18.668.990	2.868.722	6,51
I – 2014	5.505.665	2.817.933	1,95
II – 2014	11.554.846	2.556.866	4,52
III – 2014	16.722.847	2.596.730	6,44
IV – 2014	21.962.609	2.821.618	2,76
I – 2015	5.616.867	2.710.629	2,07
II – 2015	11.474.501	2.806.482	1,46
III – 2015	16.703.751	2.560.249	6,52
IV – 2015	22.121.957	2.546.835	8,69
I – 2016	6.113.299	2.622.494	2,33
II – 2016	12.415.221	2.667.168	4,65
III – 2016	18.011.198	2.598.394	6,93
IV – 2016	23.606.755	3.109.916	7,59

Source: Corporate Data Processed in 2017

Based on Table 12 it can be seen that at the beginning of the period of the ratio of inventory turnover is 1.33, while at the end of the period the ratio of inventory turnover is 7.59.

4.1.4. Analysis of ROA Ratio Variable Result

Return on assets ratio (ROA) is a ratio that compares the amount of profit with assets owned by the company. This ratio can be seen in the following table:

Table 13. ROA Ratio Result In Billion

Quarter	Net profit	Total Activa	ROA
I – 2011	1.704.047	3.999.132	0,43
II – 2011	1.050.591	4.805.117	0,22
III – 2011	1.595.200	4.347.697	0,37
IV – 2011	2.064.049	4.513.084	0,46
I – 2012	625.086	4.646.584	0,13
II – 2012	1.193.117	5.880.050	0,20
III – 2012	1.737.905	5.251.818	0,33
IV – 2012	2.287.242	5.766.682	0,40
I – 2013	697.999	5.770.551	0,12
II – 2013	1.367.828	7.788.252	0,18
III – 2013	1.940.894	7.183.591	0,27
IV – 2013	2.286.639	8.001.739	0,29
I – 2014	681.209	9.270.614	0,07
II – 2014	1.281.863	10.815.562	0,12
III – 2014	2.001.036	9.328.671	0,21
IV – 2014	2.522.328	9.870.264	0,26
I – 2015	728.834	10.807.090	0,07
II – 2015	1.670.571	11.470.721	0,15
III – 2015	2.314.598	10.365.185	0,22
IV – 2015	3.025.095	10.173.713	0,30
I – 2016	979.813	10.325.228	0,10
II – 2016	2.029.878	11.008.006	0,18
III – 2016	2.934.589	10.369.021	0,28
IV – 2016	3.635.216	10.401.125	0,35

Source: Corporate Data Processed in 2017

Based on Table 13 it is known that ROA at the beginning of the period is 43%. While the amount of ROA at the end of the period of 35%.

4.2. Discussion

1. Effect of Cash Turnover Ratios, Receivable Turnover Ratios and Inventory Turnover Ratios on ROA

This analysis is to answer whether the first hypothesis is acceptable. This analysis uses multiple linear regression equations. Regression coefficient calculation to form regression model is done by using SPSS version 18. The result of data analysis can be seen in Table 14 below.

Table 14. Results of Multiple Regression Equations Data Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.796	4.479		1.517	.145
	RPK	.007	.022	.080	.329	.746
	RPI	.012	.010	.312	1.266	.220
	RPP	.017	.012	.364	1.385	.181

a. Dependent Variable: ROA

Source: Corporate Data Processed in 2017

To form multiple regression equation it is necessary to know the magnitude coefficient of each variable and the value of the constant a. Based on the above table it is known that multiple regression equations can be made as follows:  $Y = 6,796 + 0,007X_1 + 0,012X_2 + 0,017X_3$

The value of coefficient b<sub>1</sub>, b<sub>2</sub>, and b<sub>3</sub> positive value means the increase Ratio cash turnover, receivable turnover ratio and inventory turnover ratio then ROA is also increasing. Do the three variables simultaneously affect the ROA then need to be tested against F arithmetic with the results as follows.

Table 15. Calculation Result F on Simultaneous Equations

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	1394.300	3	464.767	6.053	.004 <sup>a</sup>
	Residual	1535.659	20	76.783		
	Total	2929.958	23			

a. Predictors: (Constant), RPP, RPK, RPI

b. Dependent Variable: ROA

Source: Corporate Data Processed in 2017

Based on Table 15 it is known that F value counted 6,053 with significance level equal to 0,004 hence can be concluded that cycle turnover ratio, receivable turnover ratio and inventory turnover ratio have simultaneous effect to ROA. The amount of influence of the variable cash turnover ratio, receivable turnover ratio and inventory turnover ratio to ROA can be calculated by using r squared with the following results.

**Table 16. Calculation Result R Square of Simultaneous Equations**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.690 <sup>a</sup>	.476	.397	8.76259	.867
a. Predictors: (Constant), RPP, RPK, RPI					
b. Dependent Variable: ROA					

Source: Corporate Data Processed in 2017

Based on the data of Table 16 it is known that r squared is 0.476. This means the variable Ratio of cash turnover, receivable turnover ratio and inventory turnover ratio affect the ROA of 47.6% while the rest is influenced by other variables that are not intended into the equation model.

**2. Partial Variable Cash Turnover Ratio on ROA**

The second simple regression equation model can be illustrated in Table 17 as follows:

**Table 17. Second Regression Model**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.023	4.590		2.402	.025
	RPK	.049	.016	.549	3.080	.005
a. Dependent Variable: ROA						

Source: Corporate Data Processed in 2017

The second regression model can be written as follows :  $Y = 11,023 + 0,049X1$

Based on Table 17 the coefficient of variable cash rotation ratio marked positive means that the higher the cash ratio then the higher ROA as well. To know whether the variable of cash turnover ratio partially influence to ROA hence conducted analysis to t with result as follows. Based on Table 17 it is known that the value of t arithmetic is 3.080 with a significance of 0.05 or less than 5%. This means that the variable turnover ratio of cash partially affect the ROA. The magnitude of variable influence of cash turnover to ROA can be seen in the following table:

**Table 18. The r of Squared Values of The Second Partial Equation Model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.549 <sup>a</sup>	.301	.269	9.64683
a. Predictors: (Constant), RPK				

Source: Corporate Data Processed in 2017

Based on Table 18 it can be seen that r square value of 30.1% means that the ratio of cash ratio affects ROA of 30.1% while the rest is influenced by other variables not included in the model.

**3. Partial Influence Receivable Turnover Ratios On ROA**

The second simple regression model can be described as follows.

**Tabel19. Second Regression Model**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.074	4.052		2.487	.021
	RPI	.025	.006	.629	3.795	.001
a. Dependent Variable: ROA						

Source: Corporate Data Processed in 2017

The second regression model can be written as follows:  $Y = 2.487 + 3.795X2$

Based on Table 19, the variable coefficient of positive receivable turnover ratio this means the higher the receivable turnover ratio then ROA will also increase. Is the variable receivable turnover ratio partially affect the ROA then t analysis with the results as well. Based on Table 19, it is known that the value of t count is 3.795 with significance of 0.001 or less than 5%. This means that the variable receivable turnover ratio affects ROA partially.

The amount of influence of variable receivable turnover ratio to ROA can be seen by using r squared value with the result in Table 20 as follows:



**Table 20. The Value of R Squared From The Model of The Second Partial Equation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 <sup>a</sup>	.396	.368	8.97122

a. Predictors: (Constant), RPI

Source: Corporate Data Processed in 2017

Based on Table 20 it can be seen that r square value of 39.6% means the variable receivable turnover ratio affects ROA of 39.6% while the rest is influenced by other variables not included in the model.

**4. The Influence of Inventory Turnover Ratios Variable on ROA**

The second simple regression equation model can be illustrated in Table 21 as follows:

**Tabel21. The Second Regression Model**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.995	4.128		2.179	.040
	RPP	.030	.007	.647	3.980	.001

a. Dependent Variable: ROA

Source: Corporate Data Processed in 2017

The second regression model can be written as follows:  $Y = 8.995 + 0.030X_3$

Based on Table 21 the positive inventory turnover ratio coefficient means that the higher the inventory turnover ratio, the ROA will also increase. Whether the variable inventory turnover ratio has an effect on ROA partially then t analysis is done with the result as follows. Based on the above table is known t value of 3.980 with significance of 0.001 or less than 5%. This means that the variable inventory turnover ratio affects ROA partially.

The amount of influence of variable inventory turnover ratio to ROA can be seen by using r squared value with result in Table 22 as follows:

**Table 22. The r of Squared Values of The Second Partial Equation Model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.647 <sup>a</sup>	.419	.392	8.79899

a. Predictors: (Constant), RPP

Source: Corporate Data Processed in 2017

Based on Table 22 it can be seen that the r square value of 41.9% means the inventory turnover ratio affects ROA of 41.9% while the rest is influenced by other variables not included in the model.

**V. CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of research, data analysis and discussion that has been done, it can be concluded several things as follows:

1. Simultaneously the ratio of cash turnover, receivable turnover ratio and inventory turnover ratio have a positive and significant effect on ROA at PT. Indofood. F value counted 6,053 with significance level 0,004 Variable ratio of cash turnover, receivable turnover ratio and inventory turnover ratio influence to ROA equal to 47,6% while the rest influenced by other variable not included into model equation.
2. Partially variable turnover ratio of cash affect on ROA at PT. Indofood. Value t arithmetic 3.080 with significance of 0.005 or less than 5%. The r square value of 30.1% means the variable cash rotation ratio affect the ROA of 30.1% while the rest is influenced by other variables that are not included in the equation model.
3. Partially variable receivable turnover ratio effect on ROA at PT. Indofood. Value t count 3.795 with significance of 0.001 or less than 5%. The r square value of 39.6% means the variable receivable turnover ratio affects ROA of 39.6%, while the rest is influenced by other variables that are not included in the equation model.
4. Partially variable inventory turnover ratio has an effect on ROA at PT. Indofood. Value t count 3.980 with significance of 0.001 or less than 5%. The r square value of 41.9% means the variable inventory turnover ratio affects ROA of 41.9%, while the rest is influenced by other variables that are not included in the equation model.

Based on the results of the research, the conclusion has been proposed, the following recommendations are proposed:

1. For the management of PT. Indofood
  - a. Cash management  
From the results of partial research, cash turnover significantly influence on Return on assets, the company must make improvements in cash management.
  - b. Receivables management  
The Company must immediately make improvements in the management of accounts receivable especially controlling and monitoring billing routinely by supervisor sales, Financial & Accounting and head of branch, so all receivables can be accepted as maturity credit, and this can be done if there is seriousness in billing and control good from each personal assigned in an integrated way between sales, collection, operations, branch heads. Setting the target of receivables as one of the assessment indicators (KPI) of individual employee collectors, sales force, and branch heads.
  - c. Inventory management  
From the results of this study partially inventory turnover significantly affect the return on assets, then the inventory management should be evaluated and made sales estimates made by the sales team with accurate, so there is no stock void or excess stock. Determine minimum standards of purchasing inventory coordinate between heads of departments, to equalize company goals and activities in separate parts to achieve company goals efficiently.
2. For researchers  
Increase insights and references to further research and can be applied in work to develop and find solutions to solve problems by examining other factors that affect profitability.
3. For scholars and universities  
As a reference or refrensi in subsequent studies and development of insight and science that the existence of other factors that affect profitability through return on assets that is not discussed in this study.

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