

Analysis of The Effect Of Working Capital Rules On Levels Of Agricultural Companies Profitability In Indonesia Stock Exchange

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Abstract

This study aims to analyze the effect of Working Capital Turnover, Inventory Turnover, and Accounts Receivable Turnover to the Profitability of the Company, either partially or simultaneously and to analyze how big the effect on agricultural companies listed on the Indonesia Stock Exchange (BEI). The object of this study were 16 agricultural companies listed on the Indonesia Stock Exchange. The data used are secondary data obtained and the publication of financial statements for five years, the period of 2012 to 2016. The method used in this study is the method of multiple regression analysis. From this research it can be seen that partially Receivable Turnover variable has a significant positive effect on Return On Assets and Inventory Turnover have a significant negative effect on Return On Assets. But the Working Capital Turnover variable has no significant effect. Simultaneously all independent variables have a significant effect on the dependent variable. The result of determination coefficient is 0.195320, meaning the ability of independent variable in explaining the dependent variable is 19,5%, while the rest 80,5% is explained by other variable not included in research equation model.

Keywords: Working Capital Turnover, Receivable Turnover, Inventory Turnover and profitability.

Introduction

The technological development that continues to increase today, also the number of similar companies that have emerged makes business competition increasingly tight according to market demands. This makes management problems in each company complex and also the difficulties of a company in maintaining its survival higher and more competitive. Companies are required

to always be initiative, creative and innovative with the aim of increasing productivity and profitability in an effort to win the market and be able to adjust to all kinds of changes that will occur in the future. Therefore business organizations must be able to build systematic management by utilizing the resources owned by the company.

One of the important resources owned by the company is financial resources, namely capital. Understanding of capital according to Munawir (2006) is the right or part of capital is corporate wealth consisting of paid-up wealth or originating from outside the company and wealth that is the result of the business activity itself. Capital governance can properly have a good impact on companies in creating profits. Therefore, a company manager must be able to make the right decisions to obtain and choose funds and manage working capital so that the company can run effectively and efficiently. For each company, working capital is very important because it deals with financing and the smooth operation of the company. The company issued working capital is expected to re-enter the financial account with a short period of production sales so that working capital continues to spin in the company every period (Riyanto, 2011). According to Sawir (2005) working capital is the entire current assets owned by the company, or it can also be intended as a fund that must be available to finance the daily operations of the company.

Working capital has a flexible nature, the size of working capital can be added or reduced according to company needs. Establish working capital consisting of cash, accounts receivable, inventory that must be used as efficiently as possible. The amount of working capital must be in accordance with the needs of the company, because both advantages and disadvantages together have a negative impact on the company. Excessive working capital, especially working capital in the form of cash and securities can be detrimental to the company because it causes a large gathering of funds without productive use. Besides that the excess of working capital will also cause waste in the company's operations.

Every company in carrying out its business activities always uses optimally owned working capital to make a profit. The income or profitability used by the company in order to carry out the company's business continuously. According to Toto Prihadi (2010) "Profitability is the company's ability to make a profit. Profit can be understood in various ways depending on the need for measuring the profit. Munawir (2007) argues that companies that have a larger company size have a strong incentive to present a high level of profitability compared to smaller companies, because larger companies are studied and viewed more critically by investors. Farooq et al (2012) explained that investors who would invest their funds in large companies would not necessarily produce high returns and small companies would not necessarily produce small profits, so the level of risk received by investors was not determined by assessing the size of a company. Munawir (2007) argues that companies that have a larger company size have a strong incentive to present a high level of profitability compared to smaller companies, because larger companies are studied and viewed more critically by investors. Farooq et al (2012) explained that investors who would invest their funds in large companies would not necessarily produce high returns and small companies would not necessarily produce small profits, so the level of risk received by investors was not determined by assessing the size of a company.

Based on the background described above, it can be seen that the company must be careful in handling the problem of managing the use of working capital. Previous studies were conducted more on groups of manufacturing companies, while studies that analyzed working capital in

agricultural companies listed on the Stock Exchange were still relatively small. So the authors are interested in choosing the object of research on agricultural companies listed on the Indonesia Stock Exchange (IDX). The authors are interested in conducting research entitled: “ **Analysis of The Effect of Working Capital Rules on Level of Agricultural Companies Profitability in Indonesia Stocks Exchange**”.

Literature Review

Capital Working

For each company, working capital is very important because it deals with financing and the smooth operation of the company. The company issued working capital is expected to return to the company with a short time from production sales so that working capital continues to spin in the company every period (Riyanto, 2011). According to Sawir (2005) working capital is the entire current assets owned by the company, or it can also be intended as a fund that must be available to finance the daily operations of the company. Working capital is the company's total investment in current assets or assets that are expected to be converted into cash in the short term (Keown *et all*, 2010). It is suggested that company managers can obtain optimal working capital management by balancing between profitability and liquidity. Companies must use working capital in accordance with business activities by choosing the right source of long-term debt funding and to manage business operations efficiently (A Munir, 2017).

The factors that influence working capital according to Kasmir (2010) are as follows:

a. Nature or type of company

Working capital of a service company will be relatively lower than the working capital requirements of industrial companies. Service companies usually invest a large part of their capital - capital on fixed assets used for service purposes to the public. Conversely, industrial companies must invest a considerable amount in the company's current assets so that the company has no difficulty in carrying out its operations.

b. Credit Terms

Credit terms or sales paid for in installments also greatly affect working capital. If the credit terms received at the time of the purchase are profitable, the less cash is provided to be invested in the supply of merchandise. If the purchase of goods is done in a short time after the item is received, more cash is needed and therefore more working capital.

c. Production time

The time needed to produce and obtain the goods to be sold and the price of the united stock of the item. The longer the time needed to obtain goods, the greater the working capital needed. In addition, the greater the cost of goods union will also require greater working capital.

d. Inventory turnover rate

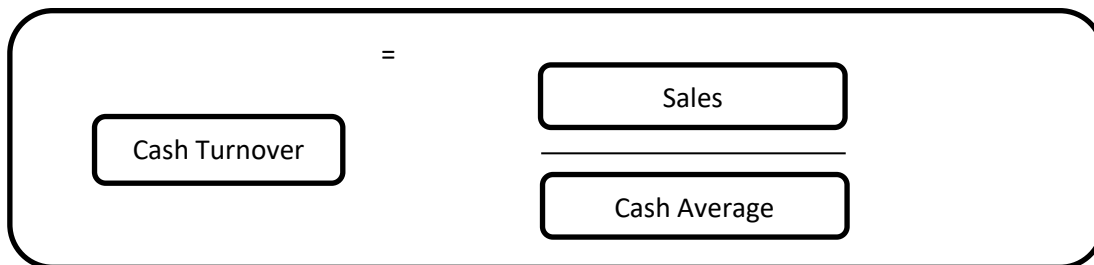
The higher the inventory turnover rate (sold and replaced again), the lower the amount of working capital needed by the company. Effective control is needed to maintain the quantity,

type and quality of goods that are appropriate and to regulate investment in inventory. The faster the inventory rotates, the less risk of loss because the inventory can result in changes in demand or changes in capital.

The use of working capital causes a change in the number of current assets and current liabilities owned by the company. These changes occur because of the need for working capital in its operational activities. The need for working capital for each company is different. However, the need for use of working capital can be calculated and analyzed by a method. The method of calculating and measuring the amount of use of working capital is determined by calculating the turnover of the components forming working capital according Harjitno and Martono (2012), namely:

1. Cash Turnover

In calculating the cash turnover rate, it will be known to what extent the level of efficiency that can be achieved by the company in an effort to utilize the existing cash inventory to realize the company's goals. What is meant by cash turnover (cash turnover) is how many times the cash money rotates in a given period through sales.



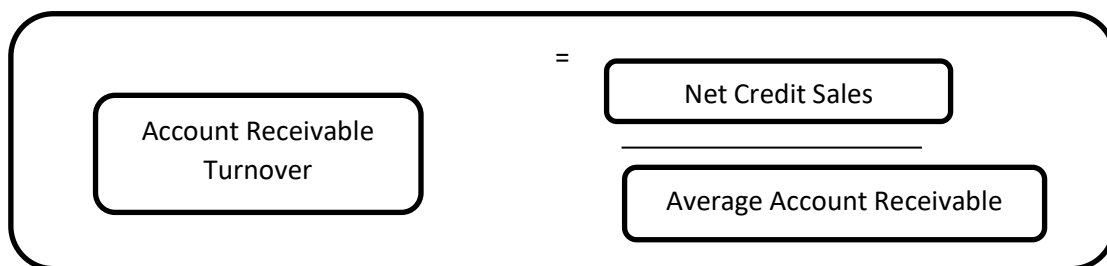
The diagram shows the formula for Cash Turnover. On the left, a box labeled "Cash Turnover" is followed by an equals sign. To the right of the equals sign, a box labeled "Sales" is positioned above a horizontal line, and a box labeled "Cash Average" is positioned below the line.

$$\text{Cash Turnover} = \frac{\text{Sales}}{\text{Cash Average}}$$

Higher cash turnover will be better, because this shows the more efficient use of cash. Likewise vice versa, with the lower cash turnover resulting in a large amount of unproductive cash that will reduce the profitability of the company.

2. Accounts Receivable Turnover

Receivables arising from credit sales will determine the amount of the receivable turnover rate. Account receivable turnover is the boundary period of accounts receivable since the occurrence of accounts receivable until the receivables can be billed in the form of cash and can eventually be spent back into inventory and sold on credit into accounts receivable again.



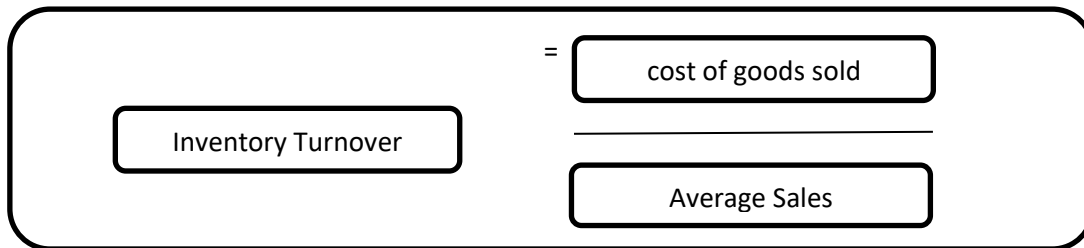
The diagram shows the formula for Accounts Receivable Turnover. On the left, a box labeled "Account Receivable Turnover" is followed by an equals sign. To the right of the equals sign, a box labeled "Net Credit Sales" is positioned above a horizontal line, and a box labeled "Average Account Receivable" is positioned below the line.

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

This receivable turnover rate has an effect on the size of capital embedded in accounts receivable, the higher the receivable turnover means the less capital invested in investment, because the funds that are embedded in the receivables are getting faster and faster as cash in. This incoming cash is then used again to buy inventory items which are then sold again, and so on. So that company profits can increase. The smaller the receivable turnover means the more capital invested in investment, so that it can lead to hampered increase in corporate profits.

3. Inventory Turnover

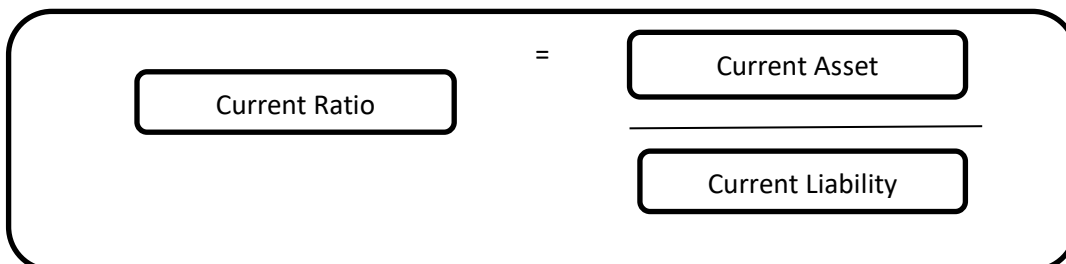
Effective inventory control is needed to maintain the quantity, type and quality of goods that are appropriate and to regulate investment in inventory. An efficient inventory and purchase process will lead to a faster inventory turnover with a higher rotation speed. The faster the inventory spins, the less risk of loss if the inventory drops in value, or if there is a change in mode. Besides that the costs associated with inventory turnover are also decreasing.


$$\text{Inventory Turnover} = \frac{\text{cost of goods sold}}{\text{Average Sales}}$$

Inventory turnover shows how many times the ability of funds embedded in a spinning inventory in a given period. The higher the level of inventory turnover, the greater the amount of funds embedded in the inventory and the faster it will increase profits. The smaller the inventory turnover, the smaller the amount of funds embedded in inventory and the more delayed in increasing profits.

4. Current Ratio

The current ratio is a ratio that gives a rough measure of the level of a company's liquidity. The current ratio can show the extent to which current assets cover current liabilities. The greater the ratio of current assets to current liabilities, the higher the company's ability to cover its short-term liabilities.

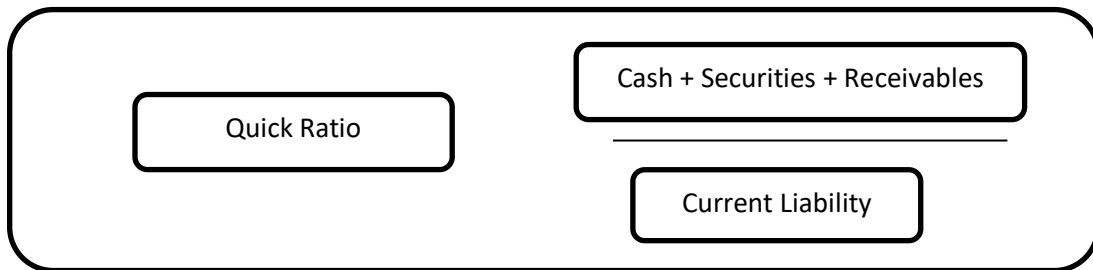

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liability}}$$

The high current ratio shows the existence of excessive cash compared to the level of need or the existence of current assets that are low in liquidity (such as inventory). Conversely, a low current

ratio is relatively more risky to the company's financial condition, but shows that management has operated current assets effectively.

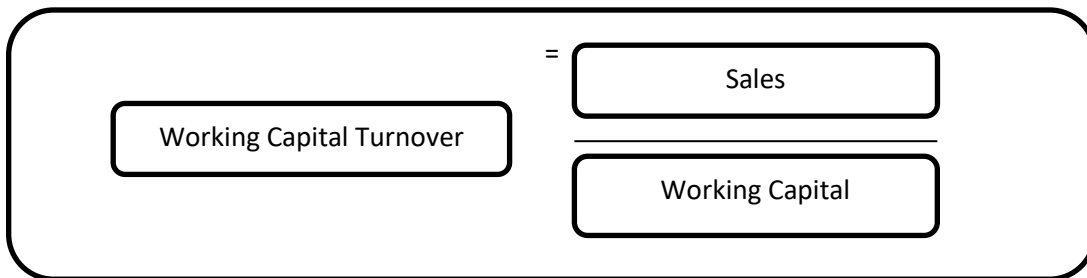
5. Quick ratio

A quick ratio is calculated by comparing cash and quick assets in one party with short-term debt on the other. This Quick asset consists of accounts receivable and securities that can be realized into money in a relatively short time.



6. Working Capital Turnover

To test the efficiency of the use of working capital, researchers can use working capital turnover, namely the ratio between sales and working capital.



High working capital turnover is caused by low working capital invested in inventories and receivables. It can also illustrate the unavailability of sufficient working capital and the existence of accounts receivable turnover and high inventory turnover. Meanwhile, low working capital turnover is due to the amount of net working capital, the low level of accounts receivable turnover and inventory turnover or the high cash balance and working capital investment in the form of securities.

Profitability

Profitability ratio is the net final result of various policies and decisions and this ratio will provide the final answer about the effectiveness of company management. This ratio also measures the profits derived from the capital used to spread operational capital both from the owner or foreign capital (capital originating from outside such as loan capital) (Hermanto & Agung, 2015).

1. Return On Assets (ROA)

This ratio shows the productivity of all company funds, both loan capital and own capital. This ratio is used to measure the effectiveness of the overall operation of the company.

$$\text{ROA} = \frac{\text{EBIT}}{\text{Active Total}}$$

2. Net Profit Margin

High margin profit shows the ability of a company to produce high profits at a certain level of sales, while a low profit margin indicates low sales for a certain level of cost or a high level of cost for a certain level of sales.

$$\text{Net Profit Margin} = \frac{\text{EBIT}}{\text{Penjualan}}$$

3. Return on Equity (ROE)

This ratio is an indicator to measure net income after tax with own capital. This ratio shows the efficiency of the use of own capital. The higher the ratio the better.

$$\text{ROE} = \frac{\text{EBIT}}{\text{Capital}}$$

Research Methodology

Population is all values both the results of calculations and measurements, both qualitative and quantitative regarding the overall object of research (Husaini & Setiadi, 2006). The population in this study are companies listed on the Indonesia Stock Exchange (IDX) observation period in

2012-2016. The research samples taken were 16 agricultural companies listed on the Indonesia Stock Exchange in 2012-2016. In this study the method or technique used is the Purposive Sampling technique which is a technique of determining samples that are specifically chosen based on research objectives and certain considerations or criteria (Sugiono, 2009). Consideration of sampling in this study is as follows:

1. Agriculture companies listed on the Indonesia Stock Exchange for the period 2012-2016.
2. The company issues financial statements for the period ending on December 31 in a row during the study period, namely 2012-2016.
3. The company earns profits every year, especially in 2012-2016.
4. Agricultural companies that publish their financial statements in Rupiah (Rp.).

The method of data collection is done by the author to complete, fulfill, and compile this thesis through several types of data and information leverage procedures, namely by means of secondary sources. Secondary sources are in the form of financial statements for 2012-2016 which can be obtained from the official website of the Indonesia Stock Exchange through www.idx.co.id. The type of research used is causality, which is a causal relationship where there is a relationship between two or more variables. The variable in question is an Independent variable, which is an influencing variable and a Dependent variable, namely the variable that is affected. The independent variables in question are working capital turnover, accounts receivable turnover and inventory turnover while the dependent variable is profitability. Multiple Linear Regression is a method of data analysis used in this study with a classic assumption test consisting of Normality, Heteroscedasticity, Autocorrelation and Multicollinearity test and T test and F. Test.

Results & Discussion

Based on the results of the study, the following results of the partial T test are as follows:

Table 1 T-Test

Variable	Coefficient	Std. Error	t-Statistic	t-tabel	Prob.
C	0.072540	0.018416	3.938978	1.991673	0.0002
WCT	-1.13E-05	6.04E-06	-1.875391	1.991673	0.0646
RTO	0.000269	0.000112	2.400069	1.991673	0.0188
ITO	-0.009296	0.002371	-3.921225	1.991673	0.0002

The table above is the result of testing independent variables namely WCT, RTO, ITO on the profitability of agricultural companies on the Indonesia Stock Exchange partially. From the test results on the equation can be seen as follows:

$$Y = 0.072540 - 1.13E-05 X1 + 0.000269 X2 - 0.009296 X3$$

X1 = Working capital turnover

X2 = Receivable turnover

X3 = Inventories turnover

Based on the regression equation, it can be seen that:

- a. The constant of 0.072540 states that if the value of the independent variable is zero, then the ROA is 0.072540.
- b. The regression coefficient (Working Capital Turnover) of $-1.13E-05$ states that for every addition 1 of the working capital turnover variable (because it has a sign -) then the value of Y (ROA) will decrease by $1.13E-05$ where other variables are considered constant.
- c. Regression coefficient (receivable turnover) of $+ 0.000269$ states that every addition of 1 receivable turnover variable (because it is marked +), the value of Y (ROA) will increase by 0.000269 where other variables are considered constant.

It can be seen that the probability value in the prob column is 0.0646 or the probability above 0.05 ($0.0646 > 0.05$). thus H_0 is accepted, so that it has the same conclusion as the t test, namely the coefficient of working capital turnover does not affect ROA. This is supported in research conducted by Reimeinda et al (2016) and Taufiqurrohman and Agnestia (2017) which state that working capital turnover (WCT) does not affect the profitability of the company. This is because company companies are unable to manage current assets for current debt effectively and efficiently to generate sales.

- c. Test the coefficient significance (receivable turnover) in the regression model:

It can be seen that the t-test for the receivable turnover coefficient is 2.400069, while the table can be obtained in the t-test table, with $\alpha = 0.05$ and $df = 76$ (obtained from formula $n-2$, where n is the number of data, $80-2$). Obtained table is 1.991673. Because of the t-test $< t$ table, ($2.400069 > 1.991673$), then H_0 is accepted, so it can be concluded that the receivable turnover coefficient affects ROA. It can be seen that the probability value in the prob column is 0.0188 or the probability is below 0.05 ($0.0188 < 0.05$). Thus H_0 is rejected, so that it has the same conclusions as the t test, namely receivable turnover which has an effect on ROA. This is supported in research conducted by Putri and Sudiarta (2015) and Utami and Dewi (2016) which state that receivable turnover (RTO) has a positive effect on profitability. The existence of a positive influence means that the faster the accounts receivable turnover, the less risk the management will invest in the form of accounts receivable, which means that the increase in sales will be followed by cash receipts, where the health condition of cash is used as a reference for the company's profitability.

- b. Test the coefficient significance (inventory turnover) in the regression model:

It can be seen that the tcount for the inventory turnover coefficient is 3.921225, while the table can be obtained in the t-test table, with $\alpha = 0.05$ and $df = 76$ (obtained from formula $n-2$, where n is the number of data, $80-2$). Obtained table is 1.991673. Because t-test $> t$ -table, ($3.921225 > 1.991673$), then H_0 is accepted, so it can be concluded that the inventory turnover coefficient affects ROA. It can be seen that the probability value in the prob column is 0.0002 or the

probability is below 0.05 (0.0002 <0.05). Thus H0 is rejected, so that having the same conclusion as the t test, namely inventory turnover has an effect on ROA.

This is supported in research conducted by Reimeinda et al (2016) and Aryani (2012) which states that Inventories Turnover (ITO) has a negative effect on profitability. The existence of a negative influence means that the lower the inventory turnover, the lower the level of profitability of the company. From the partial significance test (t) above, it can be concluded with a summary in the table below:

d. The regression coefficient (inventory turnover) of - 0.009296 states that each 1 of the inventory turnover variable (because it is marked -) then the value of Y (ROA) will decrease by 0.009296 where other variables are considered constant. In addition, from the regression equation obtained, it will be tested whether the constants and coefficients of the independent variables have a significant or no influence on the dependent variable, for this reason a partial test (t test) is conducted. This test can be done using two methods, the first with the t test which compares the t-test with t-table, and the second with the significance test. The following is the test:

a. Test the significance of constants in the regression model:

It can be seen that the t-test for constants is 3.938978, while the t-table can be obtained in the t-test table, with a = 0.05 and df = 76 (obtained from formula n-2, where n is the number of data, 80-2). Obtained table is 1.991673. Because in the t-test session > t-table (3.938978 > 1.991673), then H0 is rejected, so it can be concluded that the constant has an effect on ROA. It can be seen that the probability value in the prob column is 0.0002 or the probability is below 0.05 (0.0002 <0.05). Thus H0 is rejected, so that it has the same conclusion as the t test, namely the cost effect on ROA.

b. Test the coefficient significance (working capital turnover) in the regression model:

It can be seen that the t-statistic for the working capital turnover coefficient is 1.875391, while the t-table can be obtained in the t-test table, with a = 0.05 and df = 76 (obtained from formula n-2, where n is the amount of data, 80-2) Obtained table is 1.991673. Because the t-test <t table, (1.875391 <1.991673), then H0 is accepted, so it can be concluded that the coefficient of working capital turnover does not affect ROA.

Table 2

T-Test Results

Variable	Coefficient	t-staistic Value	T-Table Value	Prob.	alph a = 5%	Explanation
WCT	-1.13E-05	- 1.875391	1.991673	0.0646	0.05	No-Effect
RTO	0.000269	2.400069	1.991673	0.0188	0.05	Positive Effect
ITO	-0.009296	-	1.991673	0.0002	0.05	Negative Effect

		3.921225				
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Conclusion

This study aims to find empirical evidence about the effect of working capital management on the level of profitability of agricultural companies listed on the Indonesia Stock Exchange with a sample of 16 companies in the period 2012 - 2016. Based on the results of data analysis obtained from multiple linear analysis described in the previous chapter, some conclusions can be described as follows:

1. Simultaneously the three financial ratios used in this study, namely: Working Capital Turnover (WCT), Receivable Turnover (RTO) and Inventory Turnover (ITO) have a significant influence on the profitability of agricultural companies listed on the Stock Exchange Indonesia for the period of 2012 - 2016. So that it can be concluded that these three variables can be used by investors as a material consideration for making investment decisions.
2. Partially the Working Capital Turnover (WCT) variable does not significantly influence Agriculture profitability listed on the Indonesia Stock Exchange for the period of 2012 - 2016. The results of this study are in line with the research conducted by Reimeinda et al (2016) and Taufiqurrohman and Agnestia (2017) where the Working Capital Turnover variable has no significant effect on profitability.
3. Partially the Receivable Turnover (RTO) variable significantly influences the profitability of Agriculture listed on the Indonesia Stock Exchange for the period of 2012 - 2016. The results of this study are in line with the research conducted by Putri and Sudiarta (2015) and Utami and Dewi (2016) who states that receivable Turnover (RTO) has a significant effect on profitability.
4. Partially the Inventories Turnover (ITO) variable significantly influences the profitability of Agriculture listed on the Indonesia Stock Exchange for the period of 2012 - 2016. The results of this study are in line with the research conducted by Reimeinda et al (2016) and Aryani (2012) stating that Inventories Turnover (ITO) has a significant effect on profitability.
5. From the calculation of the determination coefficient above, it can be seen that R2 for the determination coefficient is 0.195 or 19.5%, it means that the influence of the independent variable on the dependent variable is 19.5% and the remaining 80.5% is explained by other variables or other factors outside the model .

Recommendation

Working capital management is one of the important factors that influence the profitability of a company, where profitability is a ratio that becomes a benchmark for companies in investing. Based on the above conclusions, the researcher proposes several suggestions as follows:

1. Investors

For investors who will invest in agricultural companies, they should pay attention to RTO and ITO variables. Because the results of the analysis of this study indicate that these variables have

a significant effect on profitability. However, the WCT variable does not have a significant effect on the profitability of agricultural companies.

2. Further researchers

Expected to be able to improve or use other variables to find out what factors can affect stock prices. In addition, it is necessary to do research again with different research objects besides the Agriculture Company and with a longer research period.

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