

# THE IMPACT OF CASH TURNOVER, ACCOUNTS RECEIVABLE TURNOVER, AND INVENTORY TURNOVER ON RETURN ON ASSETS (ROA) FOR AGRIBUSINESS COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX) DURING THE PERIOD 2016 - 2020

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## Keywords

Human Resources,  
Organizational Culture,  
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Micro

**Abstract.** The purpose of this research is to assess the impact that cash turnover, accounts receivable turnover, and inventory turnover have on the return on assets (ROA) of agricultural firms that are traded on the Indonesia Stock Exchange (IDX) throughout the period of 2016-2020. For the purpose of this research, the sample consisted of twenty agricultural corporations that were listed on the Indonesia Stock Exchange between the years 2016 and 2020. Secondary data in the form of financial statements received from the Indonesia Stock Exchange are used for the purpose of this research. In this particular research endeavor, the kind of statistical analysis that was used was a linear regression analysis of panel data carried out using the eviews 9 software. The findings indicate that CTO has a positive impact on ROA that is not statistically significant, RTO has a positive effect on ROA that is statistically significant, and ITO has a negative effect on ROA that is statistically significant.

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## 1. INTRODUCTION

A company is a business established by an individual, a group of individuals, or another entity to carry out production or distribution in order to fulfill the economic requirements of the general public (Kamaluddin & Patta Rapana, 2017). To maximize both short-term and long-term earnings, most businesses engage in production and distribution operations (El Sintarini & Djawoto, 2018). An immediate objective is to achieve optimum duration in order to meet short-term commitments, which will allow for further growth of the organization (Hasanudin & Awaloedin, 2020). Long-term aims include maximizing the value of the firm so that additional shareholders may reap the benefits (Ruspandi, 2016).

For financial managers to be able to make profits, they need to know what elements have a significant impact on the operation of the organization (Suharli & Rachpriliani, 2006). If you are interested in learning what affects how profitable a firm is, you may look at the profitability ratio. It is the company's capacity to make a profit over a certain length of time that is considered profitability (Sanjaya & Rizky, 2018).

Every business requires resources to carry out its operational tasks, one of which is capital, both working capital in the form of cash, receivables, and inventory, as well as fixed capital in the form of permanent investments (Lestari & Farida, 2017). Cash, securities, inventory receivables, and other short-term assets make up the majority of a company's working capital (Dewi & Rahayu, 2016). It is important that financial managers know how much working capital is adequate for the company's requirements, since if there is an excess or shortage of money, this will have a negative impact on the company's profitability (Month, 2015).

Ratio utilized in this research is the Return on Assets (ROA). To put it another way, the more assets a business has, the more money it may make, and vice versa. ROA is a measure of this (Oktamawati, 2017). The company's financial performance is assessed in terms of cash turnover, receivable turnover, and inventory turnover because of the huge number of operational activities that have an impact on profitability (Diana & Santoso, 2016).

Cash is one of the working capital variables that has the best capacity to meet its commitments. The greater the company's cash worth, the greater its capacity to meet its financial commitments (Jonathan & Effendi, 2020). A company's cash reserves must not go below 5% to 10% of its current assets to sustain excellent cash flow. The efficacy of cash working capital may be judged by the amount of cash that is exchanged in a certain period of time. To put it another way, if the firm has a high turnover

of cash, it will be able to better manage its operating expenses and hence boost profitability (Arianti & Rusnaeni, 2018).

Not only that, the receivables turnover rate also determines the condition of a company. A good receivables turnover rate in a company shows that the company is able to manage its company's operational activities well, the better the company in managing the receivables turnover rate, it will automatically result in an increase in the level of profit or company profitability (Hidayat & Parlindungan, 2018). Therefore, company management must be selective in managing the receivables turnover rate so that the company is well managed (Ngingang, 2019).

Inventories are part of current assets that are active in the company's operating activities which are always acquired, replaced and then sold. If the inventory turnover is long enough, the company can experience losses in terms of profits and the company will lose the opportunity to get the desired profit because the old inventory is sold (Desi, 2022). Good inventory turnover will accelerate cash returns through sales. The number of times inventory is purchased and resold is determined by the inventory turnover rate. The greater the level of inventory turnover, the greater the profitability (Diewantara & Oetomo, 2019).

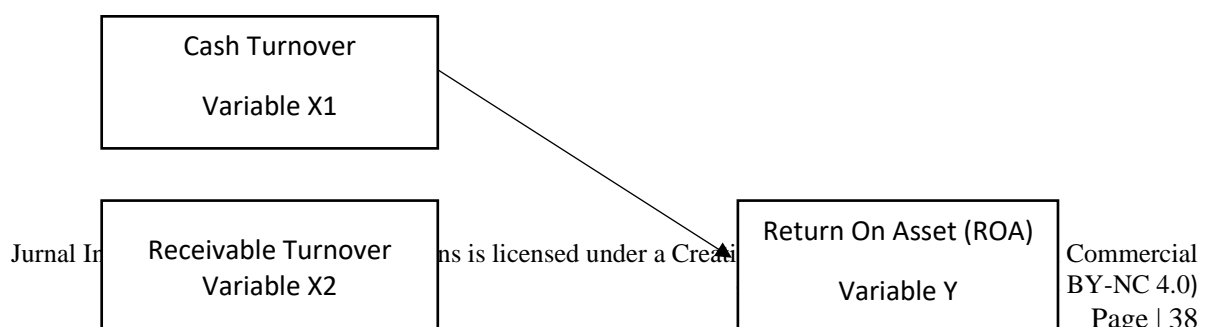
For high levels of profitability, you need not just consider the quantity of profit since the profit (profitability) with assets that are already present in the organization or frequently referred to as Return On Assets is often referred to as (ROA). Return on assets (ROA) is a ratio that may be used to assess a company's profitability based on the assets it uses (Priatna, 2016, Hasanudin, 2022). Return On Assets (ROA) is inherently positive if the firm has a positive profit level, which indicates that it has an impact on the profitability of a company. When it comes to genuine businesses, profit alone isn't enough; the organization must also be able to meet other aims (Wijaya, 2019). An alternative name for profitability ratios is the "profitability ratios" notation. Ratio on Assets is the profitability metric used in this investigation (ROA). Cash, accounts receivables, inventory, and so on are examples of current assets, which are utilized to sustain a company's profitability (Yanti & Sudiarta, 2017).

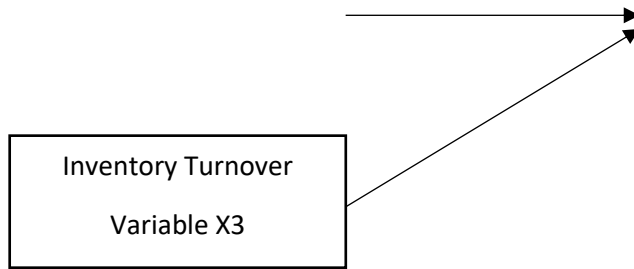
This study raises the question of whether there is an effect of cash, receivables, and inventory turnover on ROA in agribusiness companies that are listed on the Indonesia Stock Exchange. This question is based on the background information related to the impact of cash turnover, receivables turnover, and inventory turnover on profitability that was presented earlier (IDX). It is anticipated that this study will serve as a reference for the growth of knowledge as well as an understanding of putting what has been learnt into practice.

## 2. METHOD

This research makes use of a quantitative methodology, and the firms that are the focus of the investigation are agribusinesses that are listed on the Indonesia Stock Exchange (IDX). The sample population for this research consists of 21 different businesses. The method of sampling that is employed is a judgment sampling type of purpose sampling. This means that the sample is picked using specific considerations that are tailored to the research goals or research issues created in order to achieve a total of 20 samples. In this particular investigation, a technique known as multiple linear analysis was performed using the eviews 9 software.

The dependent variable of this study is Profitability, and its proxy is Return On Assets (ROA). The independent variables of this study are Cash Turnover (CTO), Accounts Receivable Turnover (RTO), and Inventory Turnover. The dependent variable of this study is Profitability, and its proxy is Return On Assets (ROA) (ITO). The analytic framework used in this research may be seen in Figure 1.





**Figure 1 Analysis Framework**

**Hypothesis**

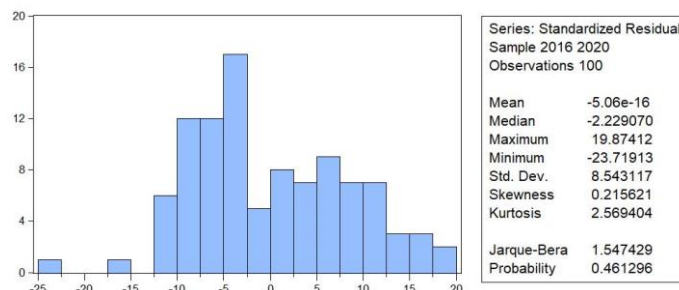
- H1: CTO has a positive effect on ROA
- H2: RTO has a positive effect on ROA
- H3: ITO has a positive effect on ROA

**3. RESULT AND DISCUSSION**

**a. Classical Assumption Test**

**a. Normality test**

In this particular investigation, the threshold of statistical significance was set at 0.05. Examining the likelihood percentages derived from the Jarque-Bera statistic (also known as J-B) under the following situations serves as the foundation for making decisions: a) The assumption of normality is satisfied if the probability value is equal to or greater than 0.05; b) The assumption of normality is not satisfied if the probability value is less than or equal to 0.05.



**Figure 2 Normality Test Results**

The probability value of the J-B statistic is 0.461296, which is larger than the significance threshold of 0.05, as shown in Figure 2. This signifies that the normalcy assumption has been satisfied.

**b. Multicollinearity Test**

It was found that a correlation coefficient of more than 0.9 between the variables in the correlation matrix (Ghozali, 2017) was indicative of multicollinearity in this research. The multicollinearity test yielded the following findings.

**Table 1 Multicollinearity Test**

	X1	X2	X3
X1	1.000000	-0.051874	-0.229136
X2	-0.051874	1.000000	-0.317365
X3	-0.229136	-0.317365	1.000000

Source: e-views, processed data (2022).

It can be shown that there is a -0.051874 connection between cash turnover and the turnover of receivables and -0.229145 correlation between cash turnover and inventory turnover. Multicollinearity between the independent variables was found to be nonexistent in Table 1, based on the findings of the test. For this reason, there is a correlation between the two variables of less than 0.9 (Ghozali, 2017).

### c. Heteroscedasticity Test

The White test may be used to identify heteroscedasticity or its absence (Ghozali, 2013, p. 134). The following is the rationale for making a decision: For heteroscedasticity, a value of Prob Obs\*R-Squared 0.05 indicates that the data is not normally distributed; a value of Prob Obs\*R-Squared 0.05 indicates that the data is normally distributed. The Prob Obs\*R-Squared value is 0.0979 > 0.05, as shown in research by the heteroscedasticity test. The heteroscedasticity does not exist.

### b. Panel Data Multiple Regression Analysis

Cash turnover, accounts receivable turnover (RTO), and inventory turnover (ITO) were all examined in a panel data regression study to see how they affect a company's Return On Assets over the 2016-2020 timeframe. In the end, this is what happens:

**Table 2 Regression Equation Data Panel**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.960081	0.793828	-2.469188	0.0160
X1	0.000524	0.009878	0.052776	0.9583
X2	0.108146	0.052122	2.075278	0.0415
X3	-0.518104	0.172864	-2.997359	0.0039

Source: e-views, processed data (2022).

The following regression equation model may be derived from Table 3's coefficients column::

$$Y = -1.960081 + 0.000524X1 + 0.108146X2 - 0.518104X3$$

Where:

- Y = Return On Asset (ROA)
- X1 = Cash Turnover (ITO)
- X2 = Receivable Turnover (RTO)
- X3 = Inventory Turnover (ITO)
- c = Constant

From the multiple regression equation, the panel data can be described as follows:

- The independent variable has a value of zero, but the Return On Assets has a value of 19.60, since the constant value is -1.960081.
- The independent variable Cash Turnover (CTO) has a coefficient value of 0.000524, which indicates that it is positive. The CTO variable has a positive impact on the Return On Assets variable, according to this value. At a significance level of 5%, it is known that the CTO variable's probability value is 0.9583, hence the ITO variable has no influence on the Return On Assets variable.
- Accounting Receivable Turnover's coefficient value is 0.108146, which indicates a positive value. The RTO variable has a positive impact on the Return On Assets variable, as can be seen from this number. The RTO variable has a substantial impact on Return On Assets at a 5% level of significance since its prob value is 0.0415, which is less than a tenth of a percent.

- Inventory Turnover (ITO) has a coefficient value of -0.518104, indicating a negative relationship. Return On Assets is impacted negatively by the ITO variable, as this number indicates. The ITO variable has a substantial impact on the Return On Assets variable at a significance level of 5% if the probability of the ITO variable is 0.0039.

### c. Hypothesis Test

In testing the hypothesis, the coefficient of determination analysis will be carried out, simultaneous effect testing (F test), partial effect testing (t test) and coefficient of determination ( $R^2$ ).

#### a. F test

The F-test is used to determine whether Return on Assets can be explained by a combination of Cash Turnover, Accounts Receivable Turnover, and Inventory Turnover. Here are the details of the test's format:

1. If the probability value (F-statistic)  $0.05$  then  $H_0$  is accepted and  $H_1$  is rejected.
2. If the probability value (F-statistic)  $< 0.05$  then  $H_0$  is rejected  $H_1$  is accepted.

**Table 3 Simultaneous Significance Test Results (F-Test)**

R-squared	0.147363	Mean dependent var	108.0534
Adjusted R-squared	0.062084	S.D. dependent var	364.7486
S.E. of regression	353.2456	Akaike info criterion	14.66674
F-statistic	1.728245	Durbin-Watson stat	1.671034
Prob(F-statistic)	0.093945		

Source: e-views, processed data (2022).

The goal of this experiment is to see whether the independent factors have any influence on the dependent variable when they are tested in conjunction with one another. In light of Table 4's Prob. F-statistic of  $0.093945 > 0.05$ , it can be deduced that the Return On Assets variable is unaffected by the three independent variables of CTO, RTO, and ITO.

#### b. t test

Cash Turnover, Accounts Receivable turnover and Inventory turnover are all examined separately in order to see whether they account for differences in Return on Assets (ROA). Tests were carried out to determine which independent factors had the greatest effect on the dependent variable. Based on Table 3 above, it is known that:

- 1) CTO's coefficient is 0.000522, indicating a positive correlation. The CTO variable has a favorable impact on Return On Assets, as can be seen from this number. At a 5% level of significance, the CTO variable has no influence on Return On Assets since its probability value is  $> 0.05$ , which means it is statistically insignificant.
- 2) RTO has a positive coefficient value of 0.108144, indicating that it is an independent variable. The RTO variable has a favorable impact on Return on Assets, according to this number. The RTO variable has a substantial impact on the Return On Assets variable at a significance level of 5% if the probability value of the RTO variable is 0.0413, which is 0.05.
- 3) Independent variable ITO has a negative coefficient value of -0.518102. Return On Assets is impacted negatively by the ITO variable, as this number indicates. Assuming that the ITO variable's t statistic is 0.0037, or 0.05, then it has a significant impact on the Return On Assets variable at a level of 5% significance.

#### c. Coefficient of Determination ( $R^2$ )

The contribution of all independent factors to the dependent variable is calculated using the coefficient of determination ( $R^2$ ). Between zero and one is the coefficient of determination. We are testing to evaluate whether or not our independent variables are able to explain our dependent variables using an adjusted  $R^2$ . Close to zero in the coefficient of determination indicates a very poor capacity to

explain a certain dependent variable's ability. It is possible to anticipate practically all of the dependent variable's characteristics if a correlation coefficient close to one is present in the independent variable.

**Table 4 Coefficient of Determination (R2)**

R-squared	0.798758	Mean dependent var	5.785676
Adjusted R-squared	0.741256	S.D. dependent var	18.74714

The coefficient of determination (R-Squared) is 0.798758, as shown in Table 4. A return on asset (ROA) of 79.8% may be attributed to CTO, RTO and ITO concurrently or in combination, while the remaining 20.2% is impacted by other variables.

## Discussion

According to the findings of the hypothesis testing, the variables Cash Turnover (CTO), Accounts Receivable Turnover (RTO), and Inventory Turnover (ITO) have a substantial influence on the Return On Assets (ROA) variable on Agribusiness Companies listed on the Indonesian Stock Exchange (IDX). This conclusion is supported by the Prob value (F-statistic) of 0.093945 0.05 significance, indicating that it has no significant influence on the Return On Asset (ROA) variable.

According to partial hypothesis testing, the Cash Turnover (CTO) variable has a positive but small influence on Return On Assets. The regression coefficient value of 0.000524 and the Prob value of 0.9583 > 0.05 with a significance value of 0.05 indicate that it has a positive and insignificant influence n. A positive score implies that the bigger the company's cash turnover, the higher the value of the company's Return On Assets. The negligible impact indicates that the CTO variable has no influence on a company's Return On Assets. The findings of this study are consistent with the findings of (Pangesti, 2013), who found that cash turnover had no significant influence on profitability (ROA).

Accounts Receivable Turnover (RTO) has a positive and substantial influence on Return On Assets, according to partial hypothesis testing. This is supported by the regression coefficient value of 0.108146 and the Prob value of 0.0415 < 0.05 with a significance value of 0.05, indicating that the result is both positive and significant. A positive figure implies that the greater the company's Receivable Turnover, the better the company's Return On Assets. The negligible impact indicates that the RTO variable has no substantial influence on a company's Return On Assets. The findings of this study are consistent with the findings of (Sufiana & Purnawati, 2012), who found that Accounts Receivable Turnover has a substantial impact on profitability (ROA).

Inventory Turnover (ITO) has a negative and substantial influence on Return On Assets, according to partial hypothesis testing. The regression coefficient value of -0.518104 and the Prob value of 0.0039 < 0.05 with a significance value of 0.05 support this finding, indicating that it has a negative and significant impact. A negative score implies that the greater the company's inventory turnover, the lower the value of the company's Return On Assets. A substantial influence indicates that the ITO variable has a considerable impact on a company's Return On Assets. The findings of this study are consistent with the findings of (Sufiana & Purnawati, 2012), who found that inventory turnover has a substantial impact on profitability (ROA).

## 4. CONCLUSION

Based on the findings of the preceding study, it is possible to infer that Cash Turnover has a positive but negligible influence on Return On Assets. The study findings reveal that the probability value of 0.9583 is more than 0.05, indicating that the ratio has no significant influence, but has a positive regression coefficient of 0.000522. Meanwhile, Accounts Receivable Turnover has a large beneficial impact on Return On Assets. This is shown by the analysis findings, which reveal that the probability value of 0.0415 is less than 0.05, indicating that the ratio has a significant influence, but has a positive regression coefficient of 0.108144. Inventory Turnover has a negative and large influence on Return On Assets for the variable. This is shown by the analysis findings, which reveal that the probability value of 0.0039 is less than 0.05, indicating that the ratio is significant, but has a negative regression

coefficient of -0.518104. It was also discovered in the research that the three independent variables had no significant influence on the Return On Assets variable.

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