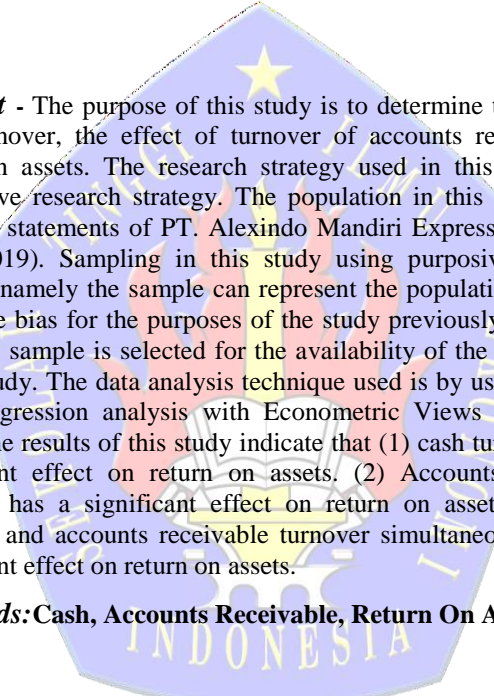


# THE EFFECT OF CASH TURNOVER AND ACCOUNT RECEIVABLE TURNOVER ON RETURNS ON ASSETS IN PT. ALEXINDO MANDIRI EXPRESS 2015-2019 PERIOD

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**Abstract** - The purpose of this study is to determine the effect of cash turnover, the effect of turnover of accounts receivable on return on assets. The research strategy used in this research is descriptive research strategy. The population in this study is the financial statements of PT. Alexindo Mandiri Express for 5 years (2015-2019). Sampling in this study using purposive sampling method, namely the sample can represent the population and does not cause bias for the purposes of the study previously described. Then the sample is selected for the availability of the data needed in the study. The data analysis technique used is by using multiple linear regression analysis with Econometric Views (Eviews) 9, 2020. The results of this study indicate that (1) cash turnover has a significant effect on return on assets. (2) Accounts receivable turnover has a significant effect on return on assets. (3) Cash turnover and accounts receivable turnover simultaneously have a significant effect on return on assets.

**Keywords:** Cash, Accounts Receivable, Return On Asset.

## I. PRELIMINARY

The development of the business world is currently increasing rapidly and is the impact of increasing competitive business competition. Facing this situation, the company or company leadership tries to create or increase company value and is able to manage the production factors that are owned effectively and efficiently so that the company's goals are achieved.

PT. Alexindo Mandiri Express is a company engaged in the delivery of goods transportation services. Transportation is a very important means of helping the economy. A region cannot be totally independent in meeting the needs of its own region, this region needs other regions to support it. The means of connecting used are transportation or transportation.

Cash is all cash and securities that serve as cash and deposits in the bank which can be withdrawn at any time. Cash turnover is a comparison between sales and the average amount of cash. The cash turnover ratio functions to measure the level of the company's working capital adequacy needed to pay bills and finance sales. The accounts receivable turnover ratio can be used as a measure of how often trade receivables turn into cash in a year. But in reality, not all receivables that are past due can be collected, even if they have to be written off for various reasons. In fact, companies need sufficient cash flow to finance their operations.

The profitability of a company can be measured by the profitability ratio. Profitability ratio is obtained by comparing net income with total assets or capital that generate profit. The profitability ratio used in this study is Return On Assets. A high level of cash and accounts receivable turnover shows that the company can maximize its profitability. Profitability will provide the final answer about the effectiveness of company managers and provide an overview of the effectiveness of company management. Profitability ratio is a ratio used to measure the level of a company's ability to generate profits from normal business activities.

According to information obtained from Mr. H. Edrizal, ST, Director of PT. Alexindo Mandiri Express, where at the beginning of the business establishment, this company only carried out its operational activities based on cargo projects so that in carrying out its business activities, the company did not really need too much working capital, because every cargo project the company carried out would get a down payment (down payment). to finance the delivery operations and use the services of the vendor for their transportation services. And to meet customer needs in terms of delivery of goods, the company will pay cash for each operational cost of delivery and if the vehicle owned is insufficient to meet customer demand, the company will use the services of the vendor. In using the services of a Vendor, The company will pay a down payment (down payment) for delivery and pay it off after delivery is complete or no later than 30 days after delivery. The effect of cash turnover and accounts receivable turnover is a tool to analyze how much cash turnover and accounts receivable turnover are in generating income during the period concerned and to find out how effective this turnover is in generating profit and added value for the company. Therefore, along with the company's business development, the company needs to know more about the effect of cash and receivables turnover and compare it with the financial achievement of return on assets.

## **II. BASIS OF THEORY AND HYPOTHESIS DEVELOPMENT**

### **Definition of Cash Turnover**

According to Sutrisno (2012: 67) "Cash in a company can be likened to blood in the human body. Every part in the company needs cash flow to carry out the company's operational activities. Therefore, it is like blood in the human body, so that if there is no blood, then that part will experience health problems ".

According to Gill in Kasmir (2017: 140), cash turnover is "To measure the level of the company's working capital adequacy needed to pay bills and finance sales. According to Sutrisno (2012: 67) "Cash in a company can be likened to blood in the human body.

## ***The Effect of Cash Turnover and Accounts Receivable Turnover on Return On Assets***

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Every part in the company needs cash flow to carry out the company's operational activities. Therefore, it is like blood in the human body, so that if there is no blood, then that part will experience health problems ". From the description above, it can be seen that cash turnover is a measuring tool used to measure the adequacy and smooth flow of cash or working capital so that the company's operations run smoothly.

According to PSAK No. 2 concerning Statement of Cash Flows (effective January 1, 2015) "Cash consists of cash on hand and demand deposits. Cash equivalents (cash equivalents) are investments that are highly liquid, short-term, and which can quickly be turned into cash in a determinable amount and have a risk of insignificant changes in value ". According to Sutrisno (2012: 67) "Cash in a company can be likened to blood in the human body. Every part in the company needs cash flow to carry out the company's operational activities. Therefore, it is like blood in the human body, so that if there is no blood, then that part will experience health problems ". To calculate the cash turnover rate in a certain period,

### **Definition of Accounts Receivable Turnover**

Accounts receivable are claims of a company to subscribers and to other parties arising from company activities. Almost all entities have receivables from other parties, whether related to sales / revenue transactions or are receivables arising from other transactions. Accounts receivable turnover is the level of smoothness of the company in collecting cash funds on receipt of receivables. Accounts receivable turnover according to Sutrisno (2012: 57) is "To measure the efficiency level of accounts receivable because receivables are given to customers, of course, must be able to bring benefits to the company. Accounts receivable turnover rate depends on the payment terms given by the company. According to Horne and Wachowicz Jr. translated by Mubarakah (2017: 172) is "To provide an insight into the quality of the company's receivables and how successful the company is in collection". From the description above, it can be seen that accounts receivable turnover is the level of smoothness of the company in collecting receivables given to customers into cash. According to Kasmir (2015: 176) Accounts receivable turnover is "the ratio used to measure how long it takes to collect accounts receivable during a period or how many times the funds invested in these receivables revolve during one period. The higher the ratio, the lower the working capital invested in accounts receivable (compared to the previous year's ratio) and of course this condition for the company is getting better ". To calculate the accounts receivable turnover rate in a certain period, the accounts receivable turnover formula according to Sutrisno (2012:

### **Definition of Return On Asset**

*Return on assets* is a company's financial ratio related to profitability measuring the company's ability to generate profits or profits (profitability) at the level of income, assets and certain share capital. According to Rudianto (2013: 197, "Return on assets is a ratio that describes the company's ability to generate profits for every one rupiah of assets used. This ratio also provides a better measure of the company's profitability because it shows the effectiveness of management in using assets to earn income." Return on assets can be interpreted in two ways, namely measuring the company's ability to utilize assets to earn profits and measuring the total results for all providers of funding sources, namely creditors and investors. 'Factors that affect return on assets:

1. Cash Turnover
2. Accounts receivable turnover
3. Inventory Turnover

The return on asset ratio measures the company's ability to generate net income based on a certain level of assets. ROA is also often referred to as (Return On Investment) ROI. A high ratio shows the efficiency of asset management, which means management efficiency (Hanafi and Halim, 2009: 84). According to Murhadi (2015: 64) the measurement of "Return on assets reflects how much return is generated for each rupiah of money invested in the form of assets. The hope is that the higher the

ROA, the better. This ratio can be formulated with return on assets equal to net income divided by total assets.

### Relationship Between Research Variables

#### 1. Effect of Cash Turnover on Returns On Asset (ROA)

Cash turnover is the ability of cash to generate income, so it can be seen several times the cash has rotated in a certain period of time. The results of the cash turnover rate show the speed at which current assets return to cash through sales. The higher the cash turnover, the better the cash management.

#### 2. Effect of Accounts Receivable Turnover on Return On Asset (ROA)

According to Hery (2017: 179) accounts receivable turnover is "the ratio used to measure the number of times the funds embedded in trade receivables will rotate in a period or how long (in days) the average receivables collection is). This ratio illustrates how quickly trade receivables are collected into cash. The higher the accounts receivable turnover ratio, the smaller the funds embedded in the receivables, this means the better for the company.

#### 3. Effect of Cash Turnover and Accounts Receivable Turnover on Return On Assets

Based on the relationships that have been stated above, each research variable has a significant effect on profitability as measured by the return on assets ratio. According to Munawir (2010, p.87) states that "The amount of profitability is influenced by the turnover factor of operating assets (the turnover rate of assets used for operations), namely cash, receivables, inventories and use of other fixed assets which are part of assets, so turnover of accounts receivable. is one of the factors that can affect profitability ". The high turnover of accounts receivable is due to the increase in collectible accounts.

### Hypothesis Development

The hypothesis in this study is as follows:

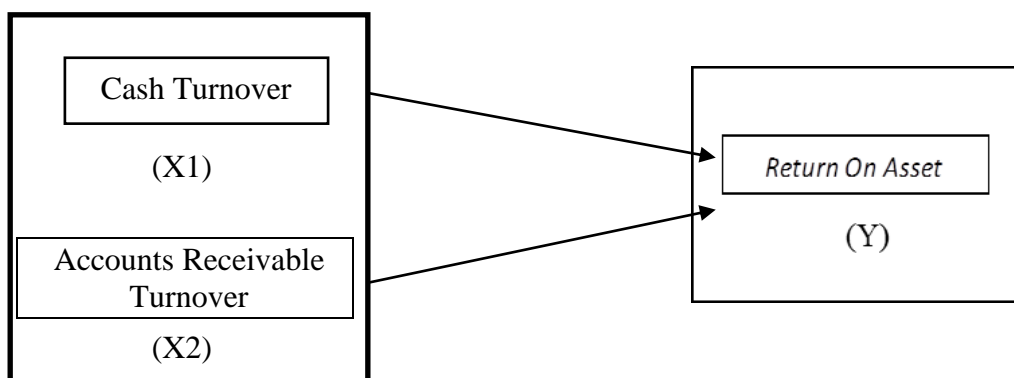
H1 : Cash turnover affects return on assets.

H2 : Accounts receivable turnover affects profitability *return on assets*.

H3 : Cash turnover and accounts receivable turnover have effect simultaneously and partially to return on assets.

### Research Conceptual Framework

Based on the description above, there is a frame of mind from research ii as follows:



### **III. RESEARCH METHODS**

#### **Research Strategy**

The method used by the author in preparing this thesis is a quantitative method. According to Sugiyono (2018: 35-36) quantitative method can be interpreted as a research method used to research a specific population or sample, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing hypotheses that have been set.

#### **Population and Research**

##### **Sample Research Population**

According to Sugiyono (2016: 80) population is "a generalization area consisting of objects or subjects that have certain qualities and characteristics that are determined by researchers to be studied and then draw conclusions." From the above understanding it can be concluded that the population is not only people, but also objects and other natural objects. Population is also not just the number that is in the object or subject being studied, but includes all the characteristics or properties possessed by the subject or object. As for the population is all financial statements of PT. Alexindo Mandiri Express, a company engaged in freight transportation services.

##### **Research Samples**

According to Sujarweni (2015: 81) the sample is "part of a number of characteristics possessed by the population that will be used for research". The sampling method used in this study was purposive sampling. Purposive sampling is a sampling technique with certain considerations or criteria. Based on previously known characteristics or pollutant properties. The sample in this study is the financial statements at PT. Alexindo Mandiri Express for 5 years, from 2015 to 2019 in the form of a financial position report and an income statement.

##### **Method of collecting data**

1. Library Research

This library research is carried out by looking for theoretical foundations sourced from scientific journals and books that are closely related to the study and research materials carried out.

2. Field Research (Field Research)

- a. Observation

Observation was carried out as the first step used to observe directly the location and process that occurred in the unit being examined by PT. Alexindo Mandiri Express.

- b. Documentation

Documentation is done to obtain data in the form of financial statements of PT. Alexindo Mandiri Express as research material.

##### **Research data**

Data collection using the form of financial reports at PT. Alexindo Mandiri. The reason the authors chose this period was because in the 2015-2019 period PT. Alexindo Mandiri Express is still running a shipping service business with a cargo project system, and at the end of 2012 PT. Alexindo Mandiri Express started a new activity to focus on shipping services in the trucking field. So it can be seen how effective the level of working capital management before and after changes in the delivery sector, and how much influence the return on assets has on the financial performance of PT. Alexindo Mandiri Express.

## Definition of Research Variables and their Measurements

Variables are attributes of a person or object that have variations between one person and another or one object to another (Zulfikar and Budiantara, 2014: 140). There are two types of variables examined in this study, namely the independent variable (independent variable) and the dependent variable (dependent variable). Each of these existing variables needs to be operationalized to facilitate variable measurement. The operational definition of a variable is the definition of a variable operationally, in practice, in real terms, in real terms within the scope of the research object / object under study (Zulfikar and Budiantara, 2014: 141).

### 1. Dependent Variable

#### a. Return On Asset (Y)

Return on assets (ROA) is a form of profitability ratio that is used to measure the company's ability to generate profits by using the total funds invested in assets used in company operations. According to Hery (2017: 193) return on assets is a ratio that shows how much the contribution of assets in creating net income. Return on assets (ROA) can be formulated as follows:

$$\text{ROA} = \frac{\text{Profit after tax}}{\text{Total Assets}}$$

Or

$$\text{ROA} = \frac{\text{Net income after tax}}{\text{Total assets}} \times 100\%$$

### 2. Independent Variable

#### a. Cash Turnover (X1)

Cash turnover shows the ability of cash to generate income, so that cash can be generated several times in a certain period. According to Bambang Riyanto (2011: 95) that what is meant by cash turnover is "the comparison between sales and the average amount of cash". The cash turnover ratio can be formulated as follows:

$$\text{Cash Turnover Ratio} = \frac{\text{Net sales}}{\text{Average Cash}}$$

b. Accounts Receivable Turnover (X2)

According to Sartono (2010: 119) "The faster the turnover period of accounts receivable shows the faster sales of credit can return to cash. Accounts receivable turnover can be formulated as follows:

$$\text{Accounts Receivable Turnover Ratio} = \frac{\text{Sales}}{\text{Total Receivables}}$$

**Data Analysis Techniques**

**1. Descriptive Statistics Test**

Descriptive statistical analysis is the statistical result that is used to analyze data by describing or describing the collected data as it is without intending to make generalized or generalized conclusions. This section describes the data of each variable that displays the characteristics of the sample used in this study. The sample characteristics include: sample mean value (mean), maximum and minimum value for each variable.

**2. Classic assumption test**

The classical assumption test used in linear regression with the Ordinary Least Square (OLS) approach includes linearity, autocorrelation, heteroscedasticity, multicollinearity, and normality tests. However, not all classical assumption tests must be carried out on every linear regression model with the OLS approach (Agus Tri and Nano Prawoto, 2016: 297). The following is the classic assumption test that will be used in this study:

**a. Normality test**

The normality test using the residual normality eviws program is a non-parametric statistical test of the Jarque-Bera (JB) table. The hypothesis used is as follows:

Ho: The data are normally distributed

Ha: The data are not normally distributed

The guidelines that will be used in making conclusions are as follows:

1. If the probability value is significant > 0.05, the distribution is normal
2. If the probability value is significant < 0.05 then the distribution is not normal

**b. Multicollinearity Test**

According to Gujarati (2016) there are several indicators in detecting multicollinearity, namely:

1. R2 value that is too high is more than 0.90 but there is no or little t-statistic which is significant.
2. The F-statistic is significant, but the t-statistic of each independent variable is not significant. To test the multicollinearity problem, you can see the correlation matrix of the independent variables, if there is a correlation coefficient that is more than 0.90 then there is multicollinearity.

**c. Autocorrelation Test**

The autocorrelation test aims to test whether in the linear regression model there is a correlation between confounding error in period t and confounding error in period t-1 (previous). One way to detect the presence or absence of autocorrelation is by performing the Durbin-Watson test (DW test). Decision making whether there is autocorrelation:

The null hypothesis	Decision	If
There is no positive autocorrelation	Refuse	$0 < d < dl$
No positive autocorrelation. No negative correlation	No decision	$dl \leq d \leq du$
There is no negative correlation	Refuse	$4 - dl < d < 4$
There is no positive or negative autocorrelation	No decision	$4 - du \leq d \leq 4 - dl$ $du < d < 4 - du$
	Refuse	

Sumber:Ghozali, 2006

#### d. Heteroscedasticity Test

A good regression model is one that is free from heteroscedasticity (Ghozali, 2016: 134). This test can be done by looking at the scatterplot graph, if any certain patterns such as dots with a certain regular pattern, it indicates heteroscedasticity occurs. **Therefore, a statistical test is needed which is more reliable** the accuracy of the results. In this observation, the heteroscedasticity test used is the test Breusch-Pagan- Godfrey. Criteria for testing the Breusch-Pagan-Godfrey test with  $\alpha = 5\%$ .

1. If the sig value  $\leq 0.05$ , it means there is heteroscedasticity.
2. If the sig value is  $\geq 0.05$ , it means that there is no heteroscedasticity.

### 3. Hypothesis testing

#### a. Partial Significance Test (t test)

According to Ghozali (2016: 97), the t statistical test basically shows how far the influence of one independent / explanatory variable individually in explaining the variation of the dependent variable. With a significance level of 0.05 (5%), the test criteria are as follows:

1. If the significance value  $\geq 0.05$  then  $H_0$  is accepted and  $H_1$  is rejected, it means that the independent variable individually has no effect on the dependent variable.
2. If the significance value  $\leq 0.05$  then  $H_1$  is accepted and  $H_0$  is rejected, meaning that the independent variable individually affects the dependent variable

#### b. Simultaneous Significance Test (Test F)

The F statistical test basically shows whether all the independent variables that are included in the model have a joint (simultaneous) influence on the dependent variable (Ghozali, 2016: 98). The F significance test was carried out using a significance level of 0.05. Hypothesis testing criteria are as follows:

1. If the significance value  $< 0.05$ , then  $H_a$  is accepted and  $H_0$  is rejected, it means that the independent variable simultaneously affects the dependent variable.
2. If the significance value  $> 0.05$ , then  $H_a$  is rejected and  $H_0$  is accepted, it means that the independent variable simultaneously has no effect on the dependent variable.

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

The value of  $R^2$  can be used to measure the level of the model's ability to explain the dependent variable. However,  $R^2$  has a fundamental weakness, namely that there can be a number of independent variables included in the model, so in this study using adjusted  $R^2$ , which ranges between 0 and 1. If the adjusted  $R^2$  value is small, it means that it has limited ability to the independent variable (X). explain the dependent variable (Y). If the adjusted  $R^2$  value gets closer to 1, the model's ability to explain the dependent variable (Y) is better.



## *The Effect of Cash Turnover and Accounts Receivable Turnover on Return On Assets*

Where :

$$KD = R2 \times 100\%$$

KD: Determination Coefficient

R2: Correlation Coefficient

### **IV. RESULTS**

#### **Description of Research Object**

PT. Alexindo Mandiri Express was founded in Jakarta on December 24, 2003 and is now domiciled in South Bekasi, as a limited liability company with notarial deed no. 102, by notary Drajat Darmaji, SH, who was approved by the Minister of Law and Human Rights of the Republic of Indonesia in Decree No. C-00641 HT.01.01.TH.2005 dated January 10, 2005.

#### **Research Sample Description**

In this study, the sample was selected by purposive sampling method. Through the purposive sampling method, it is expected that the sample can represent the population and does not cause bias for the research objectives previously described. The sample in this study is a company engaged in freight transportation services and the sampling criteria are:

1. Companies that publish annual reports for the period 2015 - 2019.
2. Companies that use the rupiah currency in their financial statements.

The sample in this study is the financial statements at PT. Alexindo Mandiri Express for 5 years, from 2015 to 2019 in the form of a financial position report and an income statement.

#### **1. Research Data Analysis**

##### **Descriptive Statistical Analysis**

The description in this study includes 3 variables, namely the ratio of cash turnover and turnover of accounts receivable to return on assets (ROA). Descriptive statistics in this study are presented in the following table:

**Table 4.1**  
**Descriptive Statistics Results**

	<b>ROA</b>	<b>CASH</b>	<b>RECEIVABLES</b>
Mean	0.079	88,367	6,629
Median	0.082	83,818	5,901
Maximum	0.092	113,703	10,350
Minimum	0.062	67,331	4,996
Std. Dev.	0.011	17,234	2,121
Observations	5	5	5

Source: Secondary Data Processed With Eviews 9, 2020

Based on the results of descriptive statistics, the average value of accounts receivable turnover is 6.629 with a standard deviation of 2.121, the average value is greater than the standard deviation, indicating that the data is distributed homogeneously with small deviations. The maximum value of 10,350 was achieved in 2015 with a minimum value of 4,996 obtained in 2019.

**a. Development of Return On Assets for the 2015-2019 Period**

**Table 4.2**  
**Development of Return On Assets for the 2015-2019 Period**

Year	Return On Asset	Change	Percentage
2015	0.085	-	0.00%
2016	0.082	-0.003	-3.9%
2017	0.062	-0.020	-32.5%
2018	0.092	0.030	32.8%
2019	0.074	-0.018	-24.0%

Source: Secondary Data Processed With Eviews 9, 2020

From the table above, it can be seen that the Return On Assets from year to year during the 2015-2019 period fluctuated. The value continued to decline from 2015 to 2017 but increased in 2018 and fell again in 2019. In terms of percentage, there was also fluctuation, even minus the value except in 2018. The value of Return on assets that fluctuates every year reflects the company's not yet stable performance.

**b. Development of Cash Turnover Ratio 2015-2019 Period**

**Table 4.3 Development of Cash Turnover Ratio for the Period of 2015-2019**

Year	Management Compensation	Change	Percentage
2015	94,931	-	0.00%
2016	83,818	-11,113	-13.3%
2017	113,703	29,885	26.3%
2018	82,052	-31,652	-38.6%
2019	67,331	-14,721	-21.9%

Source: Secondary Data Processed With Eviews 9, 2020

From the table above, it can be seen that the cash turnover ratio from year to year during the 2015-2019 period fluctuated. The value continued to decline but increased in 2017 but decreased again until 2019. In terms of percentage, there was also a fluctuation, even minus value except in 2017. The value of the cash turnover ratio that fluctuates every year reflects the company's efficiency which is not yet stable.

c. **Accounts Receivable Turnover Period 2015-2019**

**Table 4.4**  
**Accounts Receivable Turnover Development Period 2015-2019**

Year	Accounts Receivable Turnover	Change	Percentage
2015	10,350	-	0.00%
2016	6,075	-4,275	-70.4%
2017	5,901	-0.174	-2.9%
2018	5,824	-0.076	-1.3%
2019	4,996	-0,829	-16.6%

Source: Secondary Data Processed With Eviews 9, 2020

From the table above, it can be seen that accounts receivable turnover from year to year during the 2015-2019 period has decreased. But in terms of percentage it is even minus every year. The decreasing receivable turnover every year reflects the better management of companies, because the company's receivables are increasing.

**2. Classic assumption test**

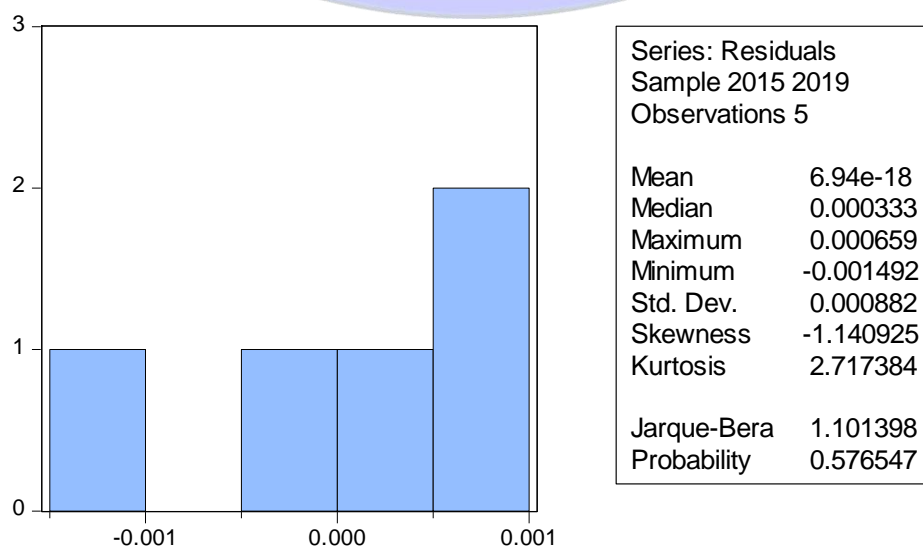
**a. Normality test**

The normality test aims to test whether the variables in the panel regression model are normally distributed or not. A good regression model is to have normal or near normal data distribution.

Ho: The data are normally distributed

Ha: The data are not normally distributed

**Figure 4.2 Normality Test**



Source: Secondary Data Processed With Eviews 9, 2020

According to Ghozali (2016: 154) if the Jarque-Bera probability value <significant value (0.05) then Ho is rejected and Ha is accepted, which means that the data does not have a normal distribution. Meanwhile, if the Jarque-Bera probability value is > significant (0.05) then Ho is accepted and Ha is rejected, which means that the data has a normal distribution. Based on the normality test histogram above, it can be seen that the Jarque-Bera probability > significance value (0.576547 > 0.05). This means that the data in this study are normally distributed and can be continued to the next test.

**b. Multicollinearity Test**

Multicollinearity test aims to test whether the regression found a high or perfect correlation between the independent variables. If the correlation value is above 0.90, it is suspected that there is multicollinearity in the model. the coefficient is below 0.90 so it is assumed that the model does not occur multicollinearity.

**Table 4.5 Multicollinearity Test Results**

	CASH	RECEIVABLES
CASH	1,000000	0.442669
RECEIVABLES	0.442669	1,000000

Source: Secondary Data Processed With Eviews 9, 2020

Based on the table above, it can be seen that the relationship between the independent variables (cash and receivables) does not show a correlation value > 0.9. Then it can be decided that the model does not occur multicollinearity symptoms.

**c. Heteroscedasticity Test**

Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. If the probability value is > 0.05 then there is no heteroscedasticity problem. However, if the probability value < 0.05, there is a heteroscedasticity problem.

**Table 4.6 Breusch-Pagan Heteroscedasticity Test Results**

<b>Heteroskedasticity Test: Breusch-Pagan-Godfrey</b>			
F-statistic	0.165818	Prob. F (2,2)	0.8578
Obs * R-squared	0.711166	Prob. Chi-Square (2)	0.7008
Scaled explained SS	0.097708	Prob. Chi-Square (2)	0.9523

Source: Secondary Data Processed With Eviews 9, 2020

Based on the table of Bresuch-pagan test results, it can be seen that the probability value of Chi-Square obs \* R-squared > significance value (0.7008 > 0.05) with these results can be concluded that there is no heteroscedasticity so it can be continued to the next test.

**d. Autocorrelation Test**

The autocorrelation test aims to test whether in the linear regression model there is a correlation between confounding error in period t and confounding error in period t-1 (previous). One way to detect the presence or absence of autocorrelation is by performing the Durbin-Watson test (DW test). Decision making whether there is autocorrelation:

**Table 4.7 Autocorrelation Test Results**

<b>Autocorrelation Test Results</b>			
R-squared	0.994104	Mean dependent var	0.079
Adjusted R-squared	0.988208	SD dependent var	0.011489
SE of regression	0.001248	Akaike info criterion	-10.25149
Sum squared resid	3.11E-06	Schwarz criterion	-10.48582
Log likelihood	28.62871	Hannan-Quinn criter.	-10.88042
F-statistic	168,6114	Durbin-Watson stat	1.851541
Prob (F-statistic)	0.005896		

Source: Secondary Data Processed With Eviews 9, 2020

Based on the table above, the Durbin Watson value is 1.851541. Based on the Durbin Watson table for k = 2, the dL value is 0.6018 and the dU value is 1.40015. Durbin Watson values meet the requirements of  $dU < DW < 4-dU$  or  $1,40015 < 1.851541 < (4 - 1,40015)$

## e. Multiple Linear Regression Analysis Test Results

Table 4.8 Regression Results Linear Multiple

Dependent Variable: ROA Method: Least Squares Date: 08/26/20 Time: 23:34 Sample: 2015 2019 Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CASH	0.00072	3.98E-05	18.09186	0.003
RECEIVABLES	-0.001597	0.000308	-5.186296	0.0352
C	0.032826	0.002915	11.26197	0.0078
R-squared	0.994104	Mean dependent var		0.079
Adjusted R-squared	0.988208	SD dependent var		0.011489
SE of regression	0.001248	Akaike info criterion		- 10.25149
Sum squared resid	3.11E-06	Schwarz criterion		- 10.48582
Log likelihood	28.62871	Hannan-Quinn criter.		- 10.88042
F-statistic	168,6114	Durbin-Watson stat		1.851541
Prob (F-statistic)	0.005896			

Based on the table above, the regression model equation between the dependent variable (ROA) and the independent variable (cash and receivables) is obtained as follows:

$$ROA_t = 0.032826 + 0.000720 \text{ CASH}_t - 0.001597 \text{ RECEIVABLES}_t + e_t$$

From the regression equation it can be explained that:

- The constant is equal to 0.032826 indicates that if the variable is independent (cash and accounts receivable) in period t is constant, then the value of ROA is 0.032826.
- The cash coefficient value is 0.00720. If the cash value in the period to is increased by 1%, while other independent variables are considered constant. Then it will increase in value ROA on and t period of 0.00720.
- Accounts receivable coefficient value is -0.001597. If the value of accounts receivable in period t increases by 1%, while other independent variables are considered constant. Then it will decrease the value ROA in period t is 0.001597.

**3. Hypothesis test**

**a. Effect of Cash on Funds and Receivables on ROA Partially (Uji**

Partial

testing is used to test the effect of the independent variable on the dependent variable. If the probability  $<0.05$  then  $H_0$  is rejected and  $H_a$  is accepted, so it can be concluded that the independent variable has a significant effect on the dependent variable. Meanwhile, if the probability  $> 0.05$  then  $H_0$  is accepted and  $H_a$  is rejected, so it can be concluded that the independent variable has no significant effect on the dependent variable. The partial hypothesis test can be seen from the following table:

**Table 4.9**

T test results				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CASH	0.00072	3.98E-05	18.09186	0.003
RECEIVABLES	-0.001597	0.000308	-5.186296	0.0352
C	0.032826	0.002915	11.26197	0.0078

Source: Secondary Data Processed With Eviews 9, 2020

The explanation of the t test table is as follows:

1. Effect of Cash Turnover Ratio on Profitability (ROA)

The test results with the panel data regression analysis above show the probability of cash  $<5\%$  significance value ( $0.0030 < 0.05$ ), then  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that cash has a significant effect on ROA.

2. Effect of Accounts Receivable Turnover on Profitability (ROA)

The test results with the panel data regression analysis above show the probability of accounts receivable  $<5\%$  significance value ( $0.00352 < 0.05$ ), so  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that accounts receivable has a significant effect on ROA.

**b. Effect of Cash and Receivables on ROA Simultaneously (Test F)**

Simultaneous testing or the F test is used to test the effect of the independent variables together on the dependent variable. The decision making criteria used is if the probability value of  $F\text{-statistic} > \alpha = 0.05$  then  $H_0$  is accepted or  $H_a$  is rejected, so it is concluded that the independent variable has a significant effect simultaneously on the dependent variable. Meanwhile, if the probability value of  $F\text{-statistic} < \alpha = 0.05$ , then  $H_0$  is rejected or  $H_a$  is accepted, so it can be concluded that the independent variable simultaneously has no significant effect on the independent variable. Simultaneous hypothesis testing can be seen from the following table:

Table 4.10

F Test Results			
R-squared	0.994104	Mean dependent var	0.079
Adjusted R-squared	0.988208	SD dependent var	0.011489
SE of regression	0.001248	Akaike info criterion	-10.25149
Sum squared resid	3.11E-06	Schwarz criterion	-10.48582
Log likelihood	28.62871	Hannan-Quinn criter.	-10.88042
F-statistic	168,6114	Durbin-Watson stat	1.851541
Prob (F-statistic)	0.005896		

Source: Secondary Data Processed With Eviews 9, 2020

Based on the results of the F test above, it can be seen that the probability value of F-statistic <5% significance value ( $0.005896 < 0.05$ ), so that  $H_0$  is rejected and  $H_a$  is accepted. Thus it can be concluded that there is a significant effect of the independent variables (cash and receivables) on the dependent variable (ROA) simultaneously or the independent variables (cash and receivables) can explain the dependent variable (ROA) in this study.

#### c. Determination Coefficient Test (R<sup>2</sup>)

According to Ghozali (2016: 95) Value R<sup>2</sup>Small means that the ability of the independent variables to explain the variation in the dependent variable is very limited. Conversely, the R<sup>2</sup> value which is almost close to one means that the independent variable provides almost all the information needed to predict the variation in the independent variable. The coefficient of determination can be seen in the following table:



**Table 4.11**

<b>Result of the Coefficient of Determination (Adjusted R-Square)</b>			
R-squared	0.994104	Mean dependent var	0.079
Adjusted R-squared	0.988208	SD dependent var	0.011489
SE of regression	0.001248	Akaike info criterion	-10.25149
Sum squared resid	3.11E-06	Schwarz criterion	-10.48582
Log likelihood	28.62871	Hannan-Quinn criter.	-10.88042
F-statistic	168,6114	Durbin-Watson stat	1.851541
Prob (F-statistic)	0.005896		

Source: Secondary Data Processed With Eviews 9, 2020

Based on the table above, the Adjusted R-squared value is 0.988208. This shows that the profitability variable (ROA) can be explained by the independent variable (cash and receivables) of 98.82%. While the rest (100% - 98.82% = 1.18%) is explained by other variables outside the research regression model.

### **Discussion and Research Results**

#### **1. Effect of Cash Turnover Ratio on Return On Assets (H1)**

The results showed that the cash variable had a significant effect on ROA. Thus this study accepts the first hypothesis (H1) which states that cash has a significant effect on ROA. This is evidenced by the results of hypothesis testing with a higher probability value smaller than the significance value of 5% ( $0.030 < 0.05$ ).

#### **2. Effect of Accounts Receivable Turnover on Return On Assets (H2)**

The results showed that the accounts receivable variable had a significant effect on ROA. Thus this study accepts the third hypothesis (H2) which states that receivables have a significant effect on debt policy. This is evidenced by the results of hypothesis testing with a probability value that is smaller than the significance value of 5% ( $0.0352 < 0.05$ ).

#### **3. The Effect of Cash Turnover Ratio and Accounts Receivable Turnover on Return On Assets (H3)**

The results showed that the cash and accounts receivable variables had a significant effect on ROA. Thus this study accepts the second hypothesis (H3) which states that cash and receivables have a significant effect on ROA together. This is evidenced by the results of hypothesis testing with a probability value that is smaller than the 5% significance value ( $0.005896 < 0.05$ ).

## **V. CONCLUSION AND IMPLICATIONS**

### **Conclusion**

Based on the data that has been presented and a description of the research results that have been stated above, we can conclude the following:

1. Cash turnover has a significant effect on return on assets. This is because the results of hypothesis testing with a probability value that is smaller than the significant value. This means that cash must be used for things that should have been spent. Because the higher the cash turnover, the better the cash management.
2. Accounts Receivable Turnover has a significant effect on return on assets. This is because the results of the hypothesis test with a probability value that is smaller than the significant value. The higher the accounts receivable turnover, the better the accounts receivable management. With a good account receivable turnover, the revenue and profits the company gets will be even greater.
3. Simultaneous cash turnover and accounts receivable turnover have a significant effect on return on assets. This is evidenced by the results of hypothesis testing with a probability value that is smaller than the significant value of 5% ( $0.005896 < 0.05$ ). So that the high and low cash turnover and receivables turnover have a significant impact on the increase and decrease in return on assets.

### **Implications**

Based on the results of this study, the researcher provides the following suggestions:

1. Further researchers are advised to increase the number of research samples so that more accurate and varied results can be obtained.
2. The object of research can be extended not only to service companies but to other types of companies such as the manufacturing sector, real estate companies, and property.
3. Further researchers are advised to add other independent variables in influencing the value of ROA and Profitability variables besides ROA.

### **Limitations and Further Research Development**

This research has limitations and it can still be developed in further research in the future as follows:

1. Research Limitations
  - a. The only variables studied were cash turnover and accounts receivable turnover *Return On Assets*.
  - b. The results of this study only apply to PT. Alexindo Mandiri Express.
2. Research Development
  - a. Research can be carried out in other companies so that the results of the research can be used as a comparison.
  - b. Research can be developed by adding independent variables that are thought to affect return on assets such as profit margin or other variables.

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