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THE EFFECT OF CASH TURNOVER (CTO), INVENTORY TURNOVER (ITO), WORKING CAPITAL TURNOVER (WCTO), CURRENT RATIO (CR), AND DEBT TO EQUITY RATIO (DER) ON RETURN ON ASSET (ROA) OF PULP AND COMPANIES LISTED ON INDONESIA STOCK EXCHANGE PERIOD 2012-2021”

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Abstract

This study aims to determine the effect of several factors that affect the Return on Assets that are in the company based on the financial statements. This research is a research that is causal or research that states one variable affects other variables. The influencing variable is called independent variable and in this research is Cash Turnover, Inventory Turnover, Working Capital Turnover, Total Current Ratio and Debt To Equity. The variable that is influenced is called dependent variable and in this research is Return on Asset. Methods in sampling, using judgmental or purposive sampling method and using Regression Data Panel as a test tool of research by using software Eviews 9.0. The sample used is pulp and paper manufacturing company and components listed on BEI 2012-2021. The result of data selection by using purposive sampling method states that, the sample used in this study as many as 4 companies and due to use the time period of 10 years of research then the number of samples there are 40 samples. The results of this study indicate that the Cash Turnover, Inventory Turnover, Working Capital Turnover, Total Current Ratio don't have significant effect on Return On Asset and Debt To Equity have a significant negative effect on Return on Assets

Keywords: Cash Turnover (CTO), Inventory Turnover (ITO), Working Capital Turnover (WCTO), Current Ratio (CR), Debt to Equity Ratio (DER) and Return On Asset (ROA).

INTRODUCTION (11 PT)

Indonesia has an important role in the world's pulp and paper industry (IPK) as the 3rd paper producer in Asia and the 8th pulp producer in the world. GPA also has an important role in the national economy. This can be seen from the contribution of CPI in the formation of GDP, which reached Rp 97.7 trillion (6.7 percent of industrial GDP or 4.18 percent of national GDP). In 2015 it should be noted that the Pulp and Paper industry accounted for 40% - 46% of the national GDP with the main contribution to mining and manufacturing.

The pulp and paper sector is an industrial company engaged in the production of paper and pulp. People's needs for paper products will always increase every year, because paper is one of the supporters of important activities in daily life considering that almost all activities of human life utilize this paper industry commodity, ranging from life activities in households, offices, industry, education, trade and so on (Ibnusantosa, 2000). Therefore, it is not uncommon to have competition in the pulp and paper industry with strong competitiveness. Competition in the pulp and paper industry, makes every company increasingly improve its financial performance so that its goal can still be achieved, namely in generating profits. *Profit* profit is an element of the most concern because the profit figure is expected to be sufficient to describe the company's overall performance (Harahap, 2017). The following is a graph of the development of the pulp and paper company's net profit in 2012-2021.

Picture 1. The Development Net Profit for 2012-2021



Based on the chart image above, of course, if observed further from the table above, each issuer experienced fluctuating net profit growth in obtaining profits. Net profit indicates the profitability of the enterprise, Profitability is one of the indicators used to measure the level of profit. The profitability ratio is used to measure the effectiveness of business results, outstanding performance is indicated by the success of management in providing the greatest profit for the company. The better the profitability index, the better the ability of a company to generate high profits. The most commonly used profitability ratio to assess overall profits is Return On Asset (ROA). According to Hery (2018) ROA is a ratio that shows how much an asset contributes in showing net profit. Net profit is the result or profit obtained from the company's activities. degree of effectiveness Management over carrying out operational activities can be measured by using the activity ratio (Sari;2016). This ratio is often also called the turnover ratio in general the higher the turnover means the more effective the level of use of the company's assets. some of the activity ratios used include; Cash Turnover, Inventory Turnover and Working Capital Turnover.

In line with maintaining the company's survival and continuity, liquidity problems are considered to have an influence on the company's profitability. In this study, the liquidity ratio used is current ratio / Cr or current ratio, CR is a measuring tool to assess the company in paying off the company's short-term debt which must be immediately met with assets (Muhammad Firza, 2018). The use of debt to meet the needs of company funds will generate profits and can have an impact on losses which are nothing but risks from the use of debt. The explanation is an illustration of the Solvency ratio, the solvency ratio used in this study is the Debt to Equity Ratio (DER). DER is a ratio used by companies in assessing the company's ability to pay off its obligations both short and long term (Ariyanti et al, 2020).

Some previous studies have been conducted to determine the relationship between the effect of Cash Turnover (CTO), Inventory Turnover (ITO), Working Capital Turnover (WCTO), Debt to Equity Ratio (DER) and Current Ratio (CR) on Return On Assets (ROA). The results of the study showed inconsistency in the results between independent and dependent variables. Of course, this attracted the attention of researchers to test the relationship of some of these

variables. Especially in manufacturing companies of the Pulp And Paper sub-sector that researchers have not found in other studies.

Research was done by (Triyanti, 2019) on the effect of CTO on ROA states that CTO affects ROA but is different from research conducted by Editors (2017) which states that cash turnover does not have a significant effect on profitability (ROA). Then the ITO variable or inventory turnover ratio also showed inconsistent results, namely research conducted by (Syukri, 2019). stated that partially ITO affects ROA different results were found in research conducted by Octavianty and Syahputra (2015) which showed that ITO had no effect on ROA. The next activity ratio is the WCTO which experiences inconsistency in the results of the study. Evidenced by research conducted by Andini Ikmawati (2021) regarding the Influence of WCTO on ROA. That partially the WCTO has a positive influence on ROA while there are different research results conducted by Octavianty and Syahputra (2015) stating that working capital (WCTO) has no effect on profitability (ROA).

The next ratio is the liquidity ratio proxied with CR also experienced research inconsistency, including research conducted by Arsyanti (2020) Partially CR has no influence on ROA in contrast to research conducted by Sari and Dwirandra (2019) that CR has a negative effect on ROA. And the ratio of the latter that is solvency proxied with DER experiences the inconsistency of the study. Proven by research conducted by Nadeak and F.Pratiwi (2019) which states that DER affects ROA, this result is not in accordance with research conducted by Yuliani (2018) which states that DER does not have a significant effect on ROA. Based on the problems from the background of the research above regarding the inconsistency of research between independent and dependent variables, researchers are even more curious to conduct a study entitled

“The Effect of Cash Turnover, Inventory Turnover, Working Capital Turnover, Current Ratio and Debt to Equity Ratio on Return On Assets in pulp and paper companies listed on the Indonesia Stock Exchange in 2012-2021.”

LITERATURE REVIEW

Analysis of financial statements

Financial ratio analysis is a technique or tool to measure a company's performance in terms of determining the level of liquidity, solvency, operating effectiveness and the degree of company profits by connecting between items in the balance sheet or income statement or a combination of both. Based on the purpose of analyzing the ratio figures, it can be classified, among others (1) liquidity ratios (2) solvency ratios, (3) profitability ratios, (4) other ratios that suit the needs of the analyzer, for example activity ratios.(Marlina Widiyanti, 2018).

1. Profitability

Profitability ratio is a ratio to measure the company's ability to generate revenue. With this ratio can measure income from the previous period to the next period. At the same time, it provides an overview of whether the company is able or not to use the company's resources optimally or vice versa (Lindayani and Dewi, 2016).

This ratio also provides a measure of the effectiveness of a company's management. This is illustrated by the profit generated from sales and investment income, which essentially means that the use of profitability ratios shows the company's efficiency. So, it can be concluded that the profitability ratio is a comparison or ratio used to measure

the ability and assess the company's success in obtaining profits related to sales, assets and equity.

a. Return On Assets / Variabel Independent

ROA is one of the profitability ratios that can measure the level of the company's ability to generate profits from the assets used. ROA is able to measure the company's ability to generate profits in the past and then projected in the future (Ariyanti 2020) The higher the Return on Assets (ROA), the higher the net profit generated from each rupiah of funds embedded in total assets. By knowing ROA we can assess whether the company has been efficient in using its assets in operating activities to generate profits. This ratio is important for management to evaluate the effectiveness and efficiency of company management in managing all company assets. In determining ROA, calculations are needed, the following formula is used to calculate ROA:

$$ROA = \frac{Net\ Profit\ X\ 100\%}{Total\ Asset}$$

Information:

A.ROA : Taking Asset Investment./ Return On Asset

B.Net Profit: the net profit owned by the company after interest and taxes.

C.Total Assets: the total of the company's total current and non-current assets within a certain period of time.

2. Activity Ratio / Independen Variabel

In managing business finances, of course there are many ratios that are considered to ensure that the existing financial planning and realization are in line with optimal. One of the financial ratios that need to be considered is the activity ratio. "According to Fahmi (2017: 109), the activity ratio is a ratio that describes the extent to which a company uses its resources to support company activities, where the use of this activity is carried out to the maximum." The following are the types of activity ratios used in this study are as follows:

a. Cash Turnover / Variabel 1

Cash turnover is a comparison between sales and the average value of cash held (Nuraini, 2021). The cash turnover rate is a measure of the efficient use of cash by the company, it is said to be an efficient measure because the cash turnover rate describes the speed of cash flow, the return of cash that has been invested in working capital. The higher the cash turnover, the better, because this means the higher the efficient use of cash. Here the CTO is formulated as follows:

$$Cash\ Tunover\ (CTO) = \frac{Sales}{Average\ of\ cash}$$

Information

- Sales: is the result of selling the company's products during a certain period.
- Average cash : is cash at the beginning of the year then added (+) by cash at the end of last year divided by /2.

b. Inventory Turnover / Variabel 2

Inventory Turnover / ITO is a ratio used to measure inventory turnover in generating sales. It can also be interpreted that inventory turnover is a ratio that shows how many times the number of inventory items is replaced in one year (Rina, 2019). The higher this ratio means the more effective and efficient the management of inventory by the company's management is to generate sales and vice versa. ITO has the following formula:

$$ITO: \frac{COGS}{Inventory}$$

Information

- *Inventory Turnover/ ITO*: Inventory Turnover Ratio
- *Cost Of Good Sold / COGS*: Cost of Goods Sold in a certain period.
- *Inventory*: Inventory value in a certain period.

c. Working Capital Turnover (WCTO)

Working Capital Turnover or working capital turnover is a ratio to measure or assess the effectiveness of the company's working capital during a certain period. This means how much working capital rotates during one period or the next period Andini Ikmawati (2021). The formula for measuring Working Capital Turnover, according to Mokhamad Manu (2019:174), is as follows:

$$WCTO = \frac{Sales}{Current Asset - Current Liabilities}$$

Information:

- Sales: That is about the sales generated in a certain period
- Current Assets: namely regarding assets in companies that can be liquidated in the form of cash, other valuables or securities which can be used as cash at any time.
- Current Liabilities: namely in the form of obligations owned by the company, has a payment due date of less than 12 months. For example, such as Accounts Payable (Account Payable). Notes Payable and Dividend Payable.

3. Liquidity Ratio / Variabel Independen.

According to Kristine Sulistiawati(2012)The liquidity ratio is the ratio used by the company to show the level of the company's ability to pay off its short-term obligations or liabilities. The liquidity ratio in this study used is the Current Ratio.

a. Current Ratio/ Variabel 4

Current Ratio is a ratio used to measure the company's ability to meet its short-term obligations that are due soon using the total current assets available(Husaini, 2014).

The higher the current ratio of a company, the smaller the risk of the company's failure to meet its short-term obligations. This will reduce investor uncertainty, but indicates idle cash. The current ratio is calculated as the quotient between total assets and total current liabilities(Arsyanti, 2020).

The following is the calculation of the formula of the Current Ratio:

$$CR = \frac{Current Assets}{Current Liabilities} \times 100\%$$

Information:

- a.) CR :Current Ratio / Current Ratio

- b.) Current Assets: Current Assets / current assets of the company that can be used within 1 year
- c.) Current Liabilities: Current Liabilities / current liabilities of the company that must be repaid within 1 year.

4. Solvency Ratio

Solvency ratio is a ratio used as an analytical tool to determine the extent to which assets are financed by debt, meaning how much debt is compared to the assets of the company itself. Santoso (2020). The ratio used to measure the solvency of the company in this study is DER.

a. Debt to Equity Ratio

DER is a ratio that compares the amount of debt to equity, or DER is a ratio that is often used by analysts and investors to see how much the company's debt is compared to the equity owned by the company or shareholders.(Yuliani, 2018).

The higher the value of the Debt to Equity Ratio, it means that the smaller the number of assets financed by the owner of the company and the greater the value of the Debt to Equity Ratio, which means the greater the number of assets financed by the owner of the company. This ratio can be formulated as follows:

$$DER = \frac{\text{Total Liability}}{\text{Equity}} \times 100 \%$$

Information

- ✓ **DER:** is Debt to Equity Ratio / ratio of debt to capital.
- ✓ **Total Liability:** the total of total short-term debt and total long-term debt within a certain time.
- ✓ **Equity:**Is the Equity / investment made by the owner of the company in the Capital account.

Hypothesis Development

In expressing the research hypothesis, the author uses Signaling theory which is related to the research variables. Signaling theory is an action taken by management to provide instructions to investors about how management views the company's prospects in the future (Brigham and Houston, 2015). In this study there are 5 independent variables / independent variables (X) used, namely the activity ratio measured by Cash Turnover (X1), Inventory Turnover (X2) and Working Capital Turnover (X3), then the liquidity ratio as measured by the Current Ratio (X4). . And the solvency ratio is proxied by the Debt to Equity Ratio (X5). While the dependent variable / dependent variable (Y) used in this study is profitability, namely Return On Assets.

1. Hypotesis 1 / The Effect of Cash Turnover (CTO) on Return On Assets (ROA)

The effect of the CTO ratio on ROA is supported by signaling theory, the higher the turnover ratio of the company's CTO, the higher the level of profit that will be obtained by the company. Of course this is good news for company stakeholders because signaling theory provides information for stakeholders, especially investors who view that the higher the cash turnover rate, the higher the percentage of profit generated from the funds invested (Nuraini, 2021).

Based on previous research conducted by Triyanti (2019) stated that CTO has a positive effect on ROA. This research is also reinforced by Muslih (2019) which states that CTO has a positive effect on ROA. Based on this, the research hypothesis is

H1: Cash Turnover (CTO) has a positive effect on Return On Assets (ROA)

2. Hypotesis 2 / The Effect of Inventory Turnover (ITO) on Return On Assets (ROA)

In this study, the effect of the ITO ratio on ROA is supported by signaling theory which states that the higher the inventory turnover rate, the higher the company's profit. Of course this is good news for stakeholders which shows that the company has managed to efficiently manage its inventory in generating profits (Thalia and Aisyah, 2019).

Based on previous research conducted by Werdiningtyas(2018)states that ITO has a positive effect on ROA, this study is also in line with research conducted by the Editor(2017)which supports that the ITO ratio has a positive effect on ROA. Based on this, the research hypothesis is

H2: Inventory Turnover (ITO) has a positive effect on Return On Assets (ROA).

3. Hypotesis 3 / The Effect of Working Capital Turnover (WCTO) on Return On Assets (ROA).

The effect of the WCTO ratio on ROA is supported by signaling theory which states that the higher the WCTO, the faster the funds or cash invested with working capital will return to cash, or the company is more effective in managing transaction activities in the company, this means that the company's profits can increase. received more quickly and will increase profits. Of course this is a good signal for investors to invest their funds in companies that have good working capital turnover in the future (Migang, 2019).

Based on previous research conducted by Felica (2020) which stated that WCTO had a positive effect on ROA, this study is also in line with research conducted by Presetiono (2016) which stated that WCTO had a positive effect on ROA. Based on this, the research hypothesis is

H3: Working Capital Turnover (WCTO) has a positive effect on Return On Assets (ROA).

4. Hypotesis 4 / The Effect of Current Ratio (CR) on Return On Assets (ROA)

In this case, the effect of the CR ratio on ROA is supported by signaling theory which indicates that the higher a company's CR means the company is able to pay off its short-term obligations. This is a good signal for the management to attract investors to invest their funds in the company. The higher the current ratio (Cr) number, the better the company's reputation in the public eye which illustrates the company's success in paying off its short-term obligations and making stock prices increase which will indirectly increase stock returns (Irman and Purwati, 2020).

Based on previous research conducted by Sari (2019) stating that CR has a positive effect on ROA, this study is also in line with research conducted by Irman (2020) and Octavianity (2015) which also supports that the CR ratio has a positive effect on ROA. Based on this, the hypothesis in this study can be formulated as follows:

H4: Current Ratio (CR) has a positive effect on Return On Assets (ROA)

5. Hypotesis/ The Effect of Debt to Equity Ratio (DER) on Return On Assets.

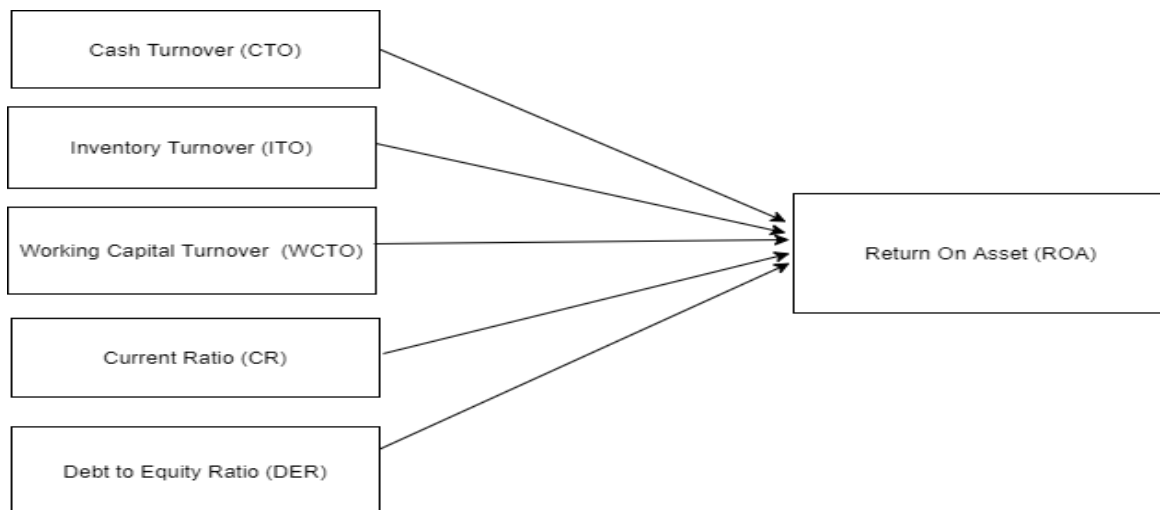
In this study, the effect of the DER ratio on ROA is supported by signaling theory where if the DER has a high value, this indicates that the company has a large debt and the higher the risk borne by the company. Companies with high DER can experience financial problems. This of course reduces the profitability of the company which results in bad news for investors because they do not invest in companies that are experiencing financial problems (Erari, 2018).

In addition, research conducted by Feronicha (2017) states that DER has a negative effect on ROA. This is reinforced by research conducted by Tamba Tommy (2017) which states that DER also has a negative effect on ROA. Based on this, the hypothesis in this study is formulated as follows:

H5: Debt to Equity Ratio (DER) has a negative effect on Return On Assets (ROA).

For the information. This is a picture as a research model to explain the influence between independen variabel and dependend variabel.

Picture 3, A Research model as hypothesis



Population And Sample

The population in this study are all pulp and paper companies listed on the Indonesia Stock Exchange (IDX) during the period 2012-2021. The data used is secondary data and obtained from audited financial statements through the Indonesia Stock Exchange website. In this study, the method used for sampling is purposive sampling method with the following criteria:

Tabel 1. Purposive Sampling method

No	Sample Criteria	Number of Companies
1.	Pulp and Paper Industry Company listed on BEI	9
2.	Companies that do not publish complete and audited financial statements in 2012-2021	(2)
3.	Companies that do not report negative profits during 2012-2021	(3)
Total Sample		4

Source: Sample Data Analysis

Based on the sampling used, the number of companies that meet the criteria are four (4) companies with an observation period of about ten (10) years from 2012-2021.

Data collection technique

In this study, the data collection methods used in this study are as follows, the literature study method and the documentation method. Literature study method by studying the literature and reviewing various literature literature such as: various journals, articles and other literature books that support the research process. While the documentation method is the process of collecting data by recording documents related to this research.

Analysis method

1. Descriptive statistics

Descriptive Statistics/ Descriptive Analysis are methods related to the collection and presentation of data. The data includes the mean (mean), standard deviation and the maximum and minimum values.

2. Panel Data Regression Analysis

Panel data regression analysis is used in this study because it refers to the amount of research data in the form of companies and the length of the year under study. The following is the equation of the panel data in this study.

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \epsilon_{it}$$

$$\text{Return On Asset } it = + 1CTO1it + 2ITO2it + 3WCTO3it + 4CR4it + 5DER5it + it$$

Information

Y_{it} = Value of Return On Asset (ROA) variable

α = Constant

β = Regression coefficient, which shows the number of increase or decrease dependent variable (Y) based on the independent variable (X)

X_1 = Cash Turnover

X_2 = Inventory Turnover

X_3 = Working Capital Turnover

X_4 = Current Ratio

X_5 = Debt to Equity Ratio

$i = 1, 2, \dots, N$

$t = 1, 2, \dots, N$

N = Number of observations

T = amount of time

NXT = Number of panel data

In estimating the panel data regression model, according to (Widarjono, 2007) there are three (3) approaches commonly used, including; Comparison test between Common Effect and Fixed Effect Model (Chow Test), Fixed Effect Model and Random Effect Model (Hausman Test), and comparative test between Common Effect and Random Effect Model (Lagrange Multiple Test). In this study, after 3 (three) estimates were made, the next step was to conduct a test to choose the right estimate between the Common Effect Model, Fixed Effect Model, and Random Effect Model. Based on the results of the Chow test and Hausman test, it can be seen that the model in this study follows the Fixed Effect Model.

3. Classic assumption test

Classical assumption test This research was conducted by simple regression analysis. The use of simple regression analysis should be free from classical assumption testing. For this reason, before a simple regression analysis is performed, the classical assumptions must be tested first. Classical assumption test is done by using normality test, multicollinearity test, heteroscedasticity test and autocorrelation test.

4. Hypothesis testing

a. Partial Test (T Test)

The T test is an individual partial regression coefficient test that is used to determine whether the independent variable (X) individually affects the dependent variable (Y). If the significance probability value is less than 0.05 then an independent variable has a significant effect on the dependent variable. The hypothesis is accepted if the significant level $\alpha < 0.05$.

2. Coefficient of Determination

The coefficient of determination (adjusted R square) is a percentage that explains the ability of an independent model to explain the following dependent variable in the table of results of the coefficient of determination test.

The criteria for analyzing the coefficient of determination are:

- a. If K_d detects zero (0), then the influence of the independent variable on the dependent variable is weak.
- b. If K_d detects one (1), then the influence of the independent variable on the dependent variable is strong.

Operational Variables

Tabel 2. Variable Operational Definition Table

No	Variable	Sub Variable	Indicator	Scale
1.	Activity	<i>Cash Turnover (CTO)</i>	$\frac{\text{Penjualan}}{\text{Rata – rata kas}}$	Ratio
2.	Activity	<i>Inventory Turnover (ITO)</i>	$\frac{\text{Harga Pokok Penjualan}}{\text{Persediaan}}$	Ratio
3.	Activity	<i>Working Capital Turnover (WCTO)</i>	$\frac{\text{Penjualan}}{\text{Aset lancar – Kewajiban Lancar}}$	Ratio
4.	Liquidity	<i>Current Ratio (CR)</i>	$\frac{\text{Aset Lancar}}{\text{Kewajiban Lancar}}$	Ratio
5.	Solvency	<i>Debt To Equity Ratio (DER)</i>	$\frac{\text{Total Utang}}{\text{Ekuistas}}$	Ratio
6.	Profitability	<i>Return On Assets (ROA)</i>	$\frac{\text{Laba Bersih} \times 100\%}{\text{Total Asset}}$	Ratio

RESULTS AND DISCUSSION

Tabel 3. The Result Statistic Descriptive

Information		N	Minimum	Maximum	median	mean	Standard Deviation
Variable Dependent	ROA	40	0.004833	0.137469	0.071723	0.067152	0.031722
	CTO	40	3.319234	99.79453	26.17657	32.69406	23.89461
Independent Variable	ITO	40	1.803577	8.345955	4.540459	4.734801	1.664239
	WCTO	40	1.234547	127.1238	6.333145	11.87816	21.36534
	CR	40	1.022439	3.761350	1.605683	1.748949	0.609966
	DER	40	0.140147	2.207021	1.128838	1.162263	0.475055

(Source: Processed with eviews 9 in 2022)

1. Return On Assets(ROA) has an average of 0.067152 and a standard deviation of 0.031722. This can be interpreted that the level of the issuer's ability to generate profits from its total assets is 0.067152 and the level of the size of the ROA variable data spread is 0.031722. The highest (maximum) ROA value is 0.137469 which is owned by PT Suparma

Tbk in 2021. While the lowest (Minimum) value of 0.004833 is obtained by the issuer PT. Indah Kiat Pulp & Paper Tbk in 2012.

2. Cash Turnover(CTO) has an average of 32.69406 and a standard deviation of 23.89461. This can be interpreted that the cash turnover rate describes the speed of cash flow to return the cash that has been invested in the form of working capital amounting to 32,69406 and the level of spread of data on the CTO variable is 23,89461. The highest value of CTO is 99,79453 which is owned by PT. Kedaung Setia Industrial Tbk in 2012. While the lowest value of CTO is 3.319234 which is owned by PT. Indah Kiat Pulp & Paper Tbk in 2021.

3. Inventory Turnover(ITO) has an average of 4.734801 and a standard deviation of 1.664239. This means that the level of the company's ability to utilize its inventory to generate sales is 4.734801 and the level of the ITO variable data spread size is 1.664239. The highest (maximum) value of the ITO variable is 8.345955 which is owned by the issuer PT. Kedaung Setia Industrial Tbk in 2019. While the lowest (minimum) value of the ITO variable is 1.803577 owned by the issuer PT. Indah Kiat Pulp & Paper Tbk in 2018.

4. Working Capital Turnover(WCTO) has an average of 11.87816 and a standard deviation of 21.36534. This means that the issuer's level of ability to measure the effectiveness of the company's working capital (Current Assets) in generating sales is 11,87816 and the level of spread of data on the WCTO variable is 21,36534. The highest value (maximum) is 127.1238 which is owned by the issuer PT. Suparma Tbk in 2017. While the lowest value (minimum) is 1.234547 which is owned by the issuer PT. Indah Kiat Pulp&Paper Tbk in 2020.

5. Current Ratio (CR)has an average of 1.748948 and a standard deviation of 0.609966. This can be interpreted that the level of the company's ability to fulfill its short-term obligations is 1.605683 and the level of spread of data on the CR variable is 0.609966. The highest value (maximum) is 3.761350 which is owned by the issuer PT. Suparma Tbk in 2018. While the lowest (minimum) value of 1.022439 was obtained by the issuer PT. Suparma Tbk in 2017.

6. Debt to Equity Ratio(DER) has an average of 1.162263 and a standard deviation of 0.475055. This can be interpreted that the company's debt level when compared to equity is 1.162263 and the size of the data spread is 0.475055 which is owned by PT. Kedaung Setia Industrial Tbk in 2014. The highest (maximum) value of 2.207021 was obtained by the issuer PT Indah Kiat Pulp&Paper Tbk in 2012. While the lowest (minimum) value of 0.140147 was obtained by the issuer PT Kedaung Setia Industrial Tbk in 2014.

2. Panel Data Model Test

A. Chow test

The Chow test is the initial stage of testing in determining the selection of the most appropriate model for estimating panel data, the models include the fixed effect model and the random effect model. The hypothesis used is as follows:

H0: The model follows the Common Effect Model (CEM) if the cross-section probability F and Cross-section chi-square $> (0.05)$

H1: The model follows the Fixed Effect Model (FEM) if the cross-section probabilities are F and Cross-section chi-square $< (0.05)$.

The results of the chow test are as follows:

Tabel 4. Chow Test Results

No	<i>Effect Test</i>	<i>F- Statistics</i>	<i>Probability</i>
1.	<i>Cross section F</i>	3.469659	0.0278
2.	<i>Cross-section Chi -square</i>	11.580420	0.0090

(Source: Data processed using Eviews 9, 2022)

Based on table 4.3, it shows that the probability value of the cross section f is < 0.05 , which is 0.0278 and the chi-square cross section is 0.0090. So to reject H_0 . The conclusion of the Chow test is related to the effective model using the fixed effect model.

b. Hausman test

The Hausman test is used to determine which model the best between using the Random Effect Model (REM) or Fixed Effect Model (FEM). This is test can be seen in the probability value (Prob.) of random cross-section with the hypothesis as follows:

H_0 : The model follows the Random Effect Model (REM) if the probability value (Prob.) of random cross-section $> (0.05)$

H_1 : The model follows the Fixed Effect Model (FEM) if the probability value (Prob.) of random cross-section $< (0.05)$

The results of the Hausman test are as follows:

Tabel 4. Hausman Test Results

No	<i>Effect Test</i>	<i>Statistics</i>	<i>Probability</i>
1.	<i>Random cross section</i>	0.000000	1.0000

(Source Processed using eviews 9 2022)

Based on table 3, it shows that the probability value of a random cross section > 0.05 is 1.0000. So it can be concluded that the right model in the Hausman test is the random effect model test (rejecting H_1).

c. Lagrange Multiplier Test

The Langrange Multiplier test is used to select the model to use should you use the Common Effect Model (CEM) or the Random Effect Model (REM). This test can be seen in the Breush-Pagan Probability value with hypothesis as follows:

H_0 : The model follows the Common Effect Model (CEM) if the Breush-Pagan cross-section probability value $> (0.05)$

H_a : The model follows the Random Effect Model (REM) if the probability value of the Breush-Pagan cross-section $< (0.05)$.

The results of the Lagrange Multiplier test are as follows:

Table 5. Lagrange Multiplier Test Results

<i>Breusch - Pagan</i>	<i>Cross - section</i>	<i>Hypothesis Test Time</i>	<i>Both</i>
	0.214348	1.0000	0.326105

(Source Edited with eviews 9 2022)

Based on the calculation table above, it is known that the value of food breusch in both shows a value of 0.326105. where this means > 0.05 so it rejects H_0 . In conclusion, the right model for the Lagrange multiplier test is the common effect model. Then ends the selection of the model where the right model will then proceed to the classical assumption test and hypothesis testing.

D. Model Conclusion

Tabel 5. The test results are presented in the following table:

No	Method	Test	Results
1	Chow test	CEM vs FEM	FEM
2	Hausman test	REM vs FEM	REM
3	Lagrange Multiplier Test	CEM vs REM	CEM

(Source Edited with eviews 9 2022)

Based on the results of the tests that have been carried out, it is known that in the Chow test the FEM model was selected with a cross-section f value of 0.0278 which was smaller than 0.05 and in the Hausman test the model chosen was the estimation of the REM model with a random cross-section value of 1.0000, greater than 0.05.

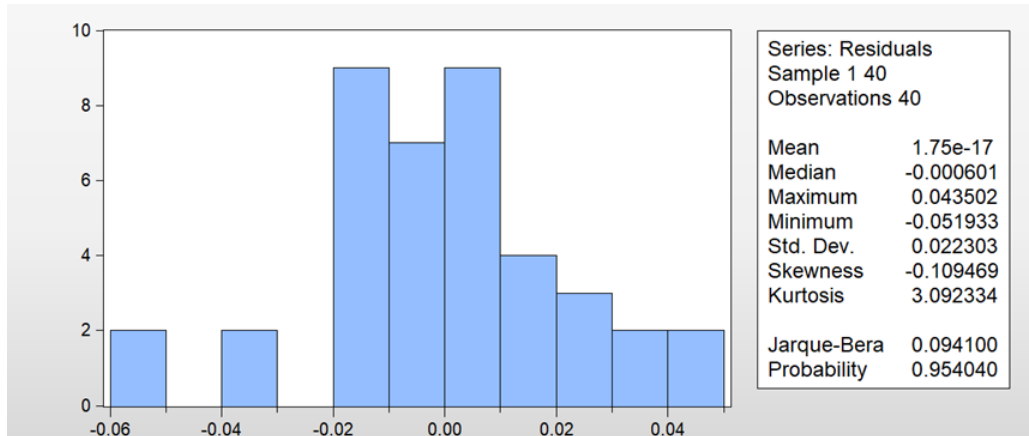
Then, in the Lagrange Multiplier test the selected model is the CEM model estimation with a Breusch-Pagan value of 0.326105 greater than 0.05. So it can be concluded that the estimation model that will be used in this study is the model Common Effect Model (CEM).

3. Classic Assumption Test Results

a. Normality test

The normality test in the regression model is used to test whether the residual value data produced is normally or not normally distributed. It is said normally if it has a significance value > 0.05 . The following are the results of the normality test.

Picture 3. The result normality test



(Source: Data processed with Eviews 9, 2022)

Based on the calculation output in the figure, it is known that the normality test results show that the probability value is 0.954040 because the probability value is greater than 0.05 ($0.954040 > 0.05$), then the residual value is considered normally distributed.

b. Multicollinearity Test

Multicollinearity is a condition where in the regression model there is a perfect or close correlation between independent variables. We recommend that a good regression model does not occur multicollinearity. If the correlation value is > 0.80 , it can be concluded that multicollinearity occurs and vice versa. The results of the multicollinearity test data processing are as follows:

Tabel 7. The Result Multicollinearity Test

	CTO_X1	ITO_X2	WCTO_X3	CR_X4	DER_X5
CTO_X1	1.0000000	0.302441	0.000381	-0.362200	-0.116673
ITO_X2	0.302441	1.0000000	-0.036074	-0.299592	-0.328225
WCTO_X3	0.000381	-0.036074	1.0000000	-0.290334	0.042461
CR_X4	-0.362200	-0.299592	-0.290334	1.0000000	-0.139468
DER_X5	-0.116673	-0.328225	0.042461	-0.139468	1.0000000

(Source: Data processed with Eviews9, year 2022)

Based on the output in the table calculation, it can be seen that the correlation value between independent variables does not exceed 0.8. So it can be concluded that there is no multicollinearity problem in this regression model.

c. Heteroscedasticity Test

Heteroscedasticity is a condition where in the regression test model there is an inequality of variance from the residuals from one observation to another. A good regression model in which there is no heteroscedasticity problem, it is said that there is no heteroscedasticity problem if the significance value is > 0.05 . The following table shows the results of the heteroscedasticity test:

Tabel 8. The Result Heteroscedasticity Test

Information		Score
<i>Obs * R-Squared</i>	<i>Prob. Chi Square</i>	0.1053

(Source: Data processed with Eviews9, year 2022)

Based on the calculation table, it is known that the values of obs* R- Squared and Prob. Chi Squared shows a numerical value of 0.1053. this means that in this regression model there is no heteroscedasticity problem where the value is greater than 0.05 (0.1053 > 0.05) in this observation there is no variance and residual inequality and is free from heteroscedasticity.

d. Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the residual error in period t with an error in period t-1 (previous), if there is a correlation then it is called an autocorrelation problem Ghozali (2013:138).

Tabel 9. The Result Autocorrelation Test

Information		Score
<i>Obs * R-Squared</i>	<i>Prob. Chi Square</i>	0.2851

(Source: Data processed withEviews9, year 2022)

Based on the calculation table output, it is known that the obs * R-Squared and Prob chi squared values are 0.2851. This means that it shows a value greater than 0.05 (0.2851 > 0.05) which can be concluded that there is no autocorrelation in this regression model.

3. Hypothesis testing

a. T Test (Partial)

Partial Test aims to examine the effect of each independent variable on the dependent variable. From the results of the partial t test can be seen from the value of each probability of each variable. Partial testing is carried out with the following conditions; If the value of tcount > ttable with a significance level (α) of 0.05, then H0 is rejected and H1 is accepted, and vice versa. If the value of tcount < ttable with a significance level (α) of 0.05, then H0 is accepted and H1 is rejected.The following are the results of the T . test

Tabel.10. The right estimation model

Variable	Effective Model Hypothesis (Common effect Model)			
	<i>Coefficient</i>	Std.Error	t- Statistics	Probability
Constant	0.147868	0.029285	5.049347	0.0000
CTO_X1	0.000121	0.000178	0.681822	0.5000
ITO_X2	-0.001987	0.002676	-0.742516	0.4629
WCTO_X3	-0.000282	0.000190	-1.482775	0.1473
CR_X4	-0.009700	0.007610	-1.274542	0.2111
DER_X5	-0.047290	0.008907	-5.309399	0.0000
Adjusted R- Squared	0.505694			
F-Statistics	6.95668			
Prob.(FStatistic)	0.000143			

(Source: Data processed with eviews 9, 2022).

1. Effect of Cash Turnover on Return On Assets

Based on the table, the estimation results of the Cash Turnover variable are obtained with a positive regression coefficient value of 0.000121 and a probability value of 0.5000. t test probability value ($0.5000 > 0.05$). This indicates that CTO has no effect on ROA of pulp & paper companies listed on the Indonesia Stock Exchange in 2012-2021. So it can be concluded that H1 is rejected.

2. Effect of Inventory Turnover on Return On Assets

Based on the calculation table, the estimation results of the Inventory Turnover variable are obtained with a negative regression coefficient value of -0.001987 and a probability value of 0.4629. t-test probability value ($0.4629 > 0.05$). This indicates that ITO has no effect on ROA of pulp & paper companies listed on the Indonesia Stock Exchange in 2012-2021. So it can be concluded that H2 is rejected.

3. Effect of Working Capital Turnover on Return on Assets

Based on the calculation table, the estimation results of the Working Capital Turnover variable have a negative regression coefficient value of -0.000282 and a probability value of 0.1473. t-test probability value ($0.1473 > 0.05$). This indicates that WCTO has no effect on ROA of pulp & paper companies listed on the Indonesia Stock Exchange in 2012-2021. So it can be concluded that H3 is rejected.

4. Effect of Current Ratio on Return On Asset

Based on table 4.9, the estimation results of the Current Ratio variable are obtained with a negative regression coefficient value of -0.009700 and a probability value of 0.2111. t test probability value ($0.2111 > 0.05$). This indicates that CR has no effect on ROA of pulp & paper companies listed on the Indonesia Stock Exchange in 2012-2021. So it can be concluded that H4 is rejected.

5. The Effect Debt to Equity Ratio on Return On Asset

Based on table 4.9, the estimation results of the Debt to equity ratio variable have a negative regression coefficient value of -0.047290 and a probability value of 0.0000. The probability value of the t test ($0.0000 < 0.05$). This indicates that the Debt to equity ratio has a negative effect on Return On Assets in Pulp and Paper companies listed on the Indonesia Stock Exchange (IDX) in 2012-2021. So it can be concluded that H5 is accepted.

b. Coefficient of Determination

Tabel 11. Coefficient of Determination Test Results

Information	Score
<i>Adjusted R-Squared</i>	0.433002

(Source: Processed with Eviews 9 in 2022)

Based on table 4.10 shows the value of the coefficient of determination (R^2) on the Adjusted R-Squared of 0.433002 or 43.30%. These results indicate that the variation of Return On Assets (ROA) can be explained by the value of Cash Turnover (CTO), Inventory Turnover (ITO), Working Capital Turnover (WCTO), Current Ratio (CR), and Debt to Equity Ratio (DER) of

43. ,30%. While the remaining 56.70% is explained by other variables not included in this model.

DISCUSSION

1. Effect of Cash Turnover on Return On Assets

Cash Turnover (CTO) has no effect on Return On Assets (ROA). This is not in accordance with the related theory, namely Signaling theory which states that "the higher the turnover ratio of the company's CTO, the higher the level of profit that will be obtained by the company. This is because the overall Pulp & Paper industry when measured by the cash turnover rate is still less effective. where the development of the ratio of each issuer from year to year shows fluctuations and is inconsistent so that its effect on ROA is very weak.

The results of this study are in line with research conducted by Arif Rakhman (2018), Minimelientes Irman and Siti Mualida (2019). This is due to fluctuating cash developments every year.

2. Effect of Inventory Turnover on Return On Assets

Inventory Turnover (ITO) has no effect on Return On Assets (ROA). Inventory Turnover has no effect on Return On Assets because the ITO variable at the time of observation showed a relatively low value in the last 10 years, namely the issuer PT Indah Kiat Pulp and Kertas Tbk which had a value of 3.36, then PT Suparna Tbk of 3.94 and PT Alkindo Naratama Tbk at 4.63. The three issuers have an average ITO value below the ideal value, which is around 5 to 10, so it will be declared good while the three issuers are not included.

This research is in line with research conducted by Novita (2018), Ni Made Vironika (2018) which states that "The lower the inventory turnover rate, the lower the company's profits will be or in other words, the longer the inventory turnover period, the more inventories will be. warehouse, this of course will minimize the profits that will be obtained by the company. This shows the company's failure to manage inventory that is less effective, thereby reducing profits.

3. Effect of Working Capital Turnover on Return On Assets

Working Capital Turnover (WCTO) has no effect on Return On Assets (ROA). The reason why WCTO has no effect on ROA is because in this study it occurred in the company PT Indah Tips Pulp & Kertas which has an average working capital turnover of 2.9552 for the last 10 years which is low compared to other issuers.

The lower the working capital turnover, the higher the sales that are not successfully carried out by the company so that it will result in the company not being able to increase profitability and the working capital turnover being ineffective. This result is supported by research conducted by Dedek (2021) and Lina (2021) which states that low working capital can reduce the company's financial performance which will hinder the company's maximum profit.

4. Effect of Current Ratio on Return On Assets

Current Ratio (CR) has no effect on Return On Assets (ROA). The reason why CR has no effect on ROA is because the current assets owned by the company are relatively small / low but the current debt position has increased.

This research is in line with research conducted by Marlina Widiyanti, (2016), Fifi Afiyanti & Djoni Djatnika (2019). A low Current Ratio (CR) is usually considered to be experiencing liquidation problems, because it indicates the company is unable to pay its current debts which in turn can reduce the company's ability to increase profits.

5. Effect of Debt to Equity Ratio on Return On Assets

Debt to Equity Ratio (DER) has a negative effect on Return On Assets (ROA). The DER ratio has an effect on ROA because the issuer PT.Suparma Tbk during the years 2012-2015 has a DER value that is always high. This shows that the change in DER impact on changes in profitability. Companies earn more debt.

With long-term obligations, the company can expand or develop its company so that the profitability obtained by the company will certainly increase. The results of this study are in accordance with research conducted by Untung Supriyadi (2020), Yuliani (2019) and Dewa Ayu Nyoman Yogi Lindasari (2018) which stated that the Debt to Equity Ratio had a negative effect on Return On Assets (ROA).

CONCLUSION

Based on the research output, several conclusions can be drawn, including:

1. The test results show that the research output of the Cash Turnover (CTO) variable has no effect on the Return On Assets (ROA) of Pulp and Paper companies listed on the Indonesia Stock Exchange in 2012-2021.
2. The test results show that the research output of the Inventory Turnover (ITO) variable has no effect on the Return On Assets (ROA) of Pulp and Paper companies listed on the Indonesia Stock Exchange in 2012-2021.
3. The test results show that the research output of the Working Capital Turnover (WCTO) variable has no effect on the Return On Assets (ROA) of Pulp and Paper companies listed on the Indonesia Stock Exchange in 2012-2021.
4. The test results show that the research output of the Current Ratio (CR) variable has no effect on the Return On Assets (ROA) of Pulp and Paper companies listed on the Indonesia Stock Exchange in 2012-2021.
5. The test results show that the research output of the Debt to Equity Ratio (DER) variable has a negative effect on Return On Assets (ROA) in Pulp and Paper companies listed on the Indonesia Stock Exchange in 2012-2021.

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