



# THE INFLUENCE OF ACCOUNTS RECEIVABLE TURNOVER AND CASH TURNOVER ON LIQUIDITY AT CV KURNIA JAYA MANDIRI PEKANBARU

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## Abstract

The purpose of this research is to figure out the influence of receivable turnover and cash turnover on Liquidity at CV Kurnia Jaya Mandiri Pekanbaru. The method used in this research are descriptive and quantitative methods. The result of this research indicates that the independent variables (receivable turnover and cash turnover) have no significant effect on the dependent variable (liquidity) in CV Kurnia Jaya Mandiri Pekanbaru. This research suggest that the company need to always control the flow of cash in and cash out so the efficiency of cash utilization can be increase.

**Keywords:** Account Receivable Turnover, Cash Turnover, and Liquidity

## 1.0 INTRODUCTION

Currently, business competition in Indonesia is increasingly competitive so it affects business growth that is getting faster. As it is known that companies in Indonesia have a great contribution to economic growth. And along with the development of the business world, companies compete with each other for profits, and both companies engaged in services and trade. Increasingly fierce competition has resulted in companies having to improve the performance and value of the company as well as companies having to manage their economic activities effectively and efficiently so that company goals can be achieved and maintain the company's survival. The success of a company is often based on the level of profit earned, while large profits do not mean that the company has worked effectively and efficiently. For this reason, company managers are required to be able to coordinate the use of company resources effectively and efficiently so that the resulting decisions will be right. Meanwhile, investors, to assess the performance and know the company's finances, need to conduct analysis in the decision-making process.

One of the components to assess the company's finances is to use Liquidity Ratios. According to Hery (2015), the liquidity ratio is a ratio that can be used to measure to what extent the company's ability to pay off its short-term obligations will soon mature. If the company is able to make payments, it means that the company is in a liquid state, whereas if the company is in a state of not having the ability to pay short-term obligations, it means that the company is in an illiquid state. A good level of liquidity will illustrate that the company's financial position is in strong condition. In addition to being able to pay off short-term debt on time, a good level of liquidity will provide smooth running of the company's day-to-day operations. The ideal level of liquidity is a condition desired by every company because in general, the higher the liquidity, the lower the risk of company failure.

CV Kurnia Jaya Mandiri Pekanbaru is one of the companies engaged in the construction sector. CV Kurnia Jaya Mandiri or what is commonly called CV KJM has been established in 2003. Due to increasing competition in the construction sector, CV Kurnia Jaya Mandiri added a credit payment system for development services performed, so that customers can pay the company on credit. However, payments from the company to suppliers cannot all be done with a credit system because some suppliers still prioritize the cash payment system.

The company's liquidity is indicated by the size of current assets, namely assets that are easily converted into cash (including cash, receivables, securities, and inventories). If the amount of cash owned by a company is greater, the liquidity will be higher. Companies that cannot control the level of liquidity will result in a loss of trust from outside parties (creditors) and can reduce the company's ability to develop its business. One of the factors that affect liquidity includes cash turnover and receivables turnover. The cash turnover rate is a ratio to measure the company's ability to pay short-term obligations with available cash. The importance of cash turnover on liquidity is the greater the cash owned by the company, the higher the liquidity, which means the greater the

company's ability to pay its obligations. A company that has high liquidity due to the presence of large amounts of cash, means that the cash turnover rate is low and reflects an overinvestment in cash. Conversely, if the amount of cash is relatively small, it means that the cash turnover is high so that the company will or can be in a liquid state. This is the same as the results of research conducted by Pujiati (2014) and Indriani (2017) that cash turnover has a significant effect on liquidity levels, but contrary to research conducted by Astuti (2014) and Mulyanti (2018) that cash turnover has no effect significant to liquidity.

Another liquid current asset is receivables. The position of receivables and the estimated time of collection can be assessed by calculating the turnover rate of the receivables. The accounts receivable turnover rate is a ratio that shows how long it takes to convert receivables into cash. Accounts receivable turnover has an important influence on liquidity. The higher the receivables turnover rate, the greater the company's ability to cover its current liabilities or the higher its liquid level. This is the same as the results of research conducted by Simamora (2007) and Nur (2008) which show that partially, accounts receivable turnover has a significant effect on liquidity. But contrary to the results of research conducted by Lestari (2016) and Indriani (2017) that receivables turnover has no significant effect on liquidity.

Based on this description, the objectives of this study are: (1) To determine and analyze the effect of Accounts Receivable Turnover on Liquidity at CV Kurnia Jaya Mandiri., (2) To determine and analyze the effect of Cash Turnover on Liquidity at CV Kurnia Jaya Mandiri.

## 2.0 LITERATURE REVIEW

### Liquidity

According to Syamsuddin (2010), liquidity is an indicator of the company's ability to pay all short-term financial obligations at maturity using available current assets.

### Liquidity Ratio

The liquidity ratio according to Kasmir (2012) is a ratio used to measure how liquid a company is. The ratio used in this study is the quick ratio. According to Sujarweni (2017), the quick ratio is a ratio that is used to measure the company's ability to pay its short-term obligations by using more liquid assets.

### Accounts Receivable Turnover

Accounts Receivable Turnover according to Kasmir (2012) is a ratio used to measure how long it takes to collect receivables for a period or how long the funds are invested in receivables for one period.

### Cash Turnover

Cash Turnover according to Ahmad (2010) can be interpreted as the period of time it takes the company to spend cash to buy materials until the time of collecting the proceeds from the sale of finished goods from these materials.

### Formulation of Hypothesis

H1 : Accounts receivable turnover has a significant effect on liquidity at CV Kurnia Jaya Mandiri Pekanbaru

H2 : Cash turnover has a significant effect on liquidity at CV Kurnia Jaya Mandiri Pekanbaru.

## 3.0 METHODOLOGY

### Place and Time of Research

This research was conducted at CV Kurnia Jaya Mandiri Pekanbaru which is located at Jalan Angkasa No. 26, Pekanbaru. This research was conducted from January 2019 to December 2019.

### Data Types and Sources

Data sources are divided into two, namely primary data and secondary data. Primary data is data obtained by researchers directly, while secondary data is data obtained by researchers from existing sources. The type of data used in this study is secondary data, namely from the quarterly reports of CV Kurnia Jaya Mandiri Pekanbaru from 2010-2017.

### Population and Sampling

A population is an object or subject that has certain characteristics according to the information determined by the researcher, as the unit of research analysis. The population used in this study were 32 financial statements of CV Kurnia Jaya Mandiri Pekanbaru from 2010 - 2017. In this study, the sampling technique used was a saturated sample. Saturated sampling is a sampling technique which all members of the population are used as samples.

### Variable Definition

#### Accounts Receivable Turnover

According to Kasmir (2012) Accounts receivable turnover is a ratio used to measure how long it takes to collect receivables for a period.

$$\text{Average Accounts Receivable} = \frac{\text{Current Receivables} + \text{Previous Receivable}}{2}$$

$$\text{Average Receivable Turnover} = \frac{\text{Net Sales}}{\text{Average Accounts Receivables}}$$

#### Cash Turnover

According to Ahmad (2010), it can be interpreted as the period of time it takes the company to spend cash to buy materials until the time of collecting the proceeds from the sale of finished goods from these materials.

$$\text{Cash Turnover} = \frac{\text{Net Sales}}{\text{Average Cash and Cash Equivalents}}$$

#### Liquidity

According to Syamsuddin (2010) is an indicator of the company's ability to pay all short-term financial obligations at maturity by using available current assets.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

#### Data Analysis Technique

The data used is CV Kurnia Jaya Mandiri Pekanbaru data within 8 years (2010 – 2017). The study used multiple linear regression analysis using the SPSS program for data processing. Previously, the classical assumption test was carried out to ensure that the regression model used did not have problems with multicollinearity, autocorrelation, and normally distributed data.

#### Descriptive Statistical Analysis

According to Sugiyono (2010), descriptive statistics are statistics used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations. Descriptive statistics include the presentation of data through tables, graphs, pie charts, pictograms, calculation of mode, median, mean (measurement of central tendency), calculation of deciles, percentiles, calculation of data spread through calculation of the average and standard deviation, and calculation of percentages.

#### Classic Assumption Test

This study uses a multiple linear regression model as an analytical tool, so it must first pass the classical assumption test so that the assumptions in the regression are met. The classical assumption test required is the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

#### Normality Test

The normality test is used to test whether the regression model of the two variables, independent and dependent, has a normal distribution or not (Ghozali, 2013). The method used to determine the normality of the regression model is to look at the normal probability plot and the one sample Kolmogorov - Smirnov test. If the spread of data (points) is close to the line and follows the direction of the diagonal line, then the regression model is normal, whereas if the spread of data (points) is away from the diagonal line, then the regression is not normal or can be seen from the value of the one sample Kolmogorov - Smirnov test Asymp. Sig (2-tailed) is greater than 0.05 then the data is normally distributed.

#### Multicollinearity Test

The multicollinearity test aims to test whether in the regression model there is a correlation between the independent variables (Ghozali, 2013). A good regression model should not have a correlation between the independent variables. Multicollinearity can be seen from the tolerance value and Variance Inflation Factor (VIF), erfon value, and condition index. If the tolerance value is above 10% and the VIF is below 10, it can be concluded that the regression model is multicollinearity free.

#### Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation (Ghozali, 2013). If the variances from the residuals of one

observation to another observation remain, it is called homoscedasticity and if different it is called heteroscedasticity.

Detection of the presence or absence of heteroscedasticity can be done by looking at the presence or absence of certain patterns on the scatterplot graph between ZRESID and ZPRED where the Y axis is Y which has been predicted and the X axis is the residual (Y predicted – Y actually) which has been standardized or can be seen from the glejser test value. where if the significant value is greater than 0.05 then there is no heteroscedasticity.

#### Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the confounding error in period t and the confounding error in the previous period (t-1). If there is a correlation, it is called an autocorrelation problem (Ghozali, 2013).

The autocorrelation test method is the Durbin-Watson test (D-W test). The decision-making regarding whether there is autocorrelation is: (1) If the DW value lies between the upper bound ( $d_u$ ) and ( $4-d_u$ ), then the autocorrelation coefficient is equal to zero, meaning that there is no autocorrelation. (2) If the DW value is lower than the lower bound ( $d_l$ ), then the autocorrelation coefficient is greater than zero, meaning that there is a positive autocorrelation. (3) If the DW value is greater than ( $4-d_l$ ) then the autocorrelation coefficient is smaller than zero, meaning that there is a negative autocorrelation. (4) If the DW value lies between the upper limit ( $d_u$ ) and below the lower limit ( $d_l$ ) or the DW lies between ( $4-d_u$ ) and ( $4-d_l$ ) then the results cannot be concluded.

#### F Test

According to Ghozali (2013), the F Statistical Test basically shows whether all independent variables or independent variables are included in the influence model on the dependent variable or the dependent variable. If the F value is significant at the 5% probability level ( $F < 5\%$ ), it can be said that all independent variables affect the dependent variable.

#### Coefficient Determination ( $R^2$ )

According to Ghozali (2013), the coefficient of determination is a tool to measure how far the model's ability to explain the variation of the dependent variable. A small value of  $R^2$  means that the ability of the independent variables in explaining the variation of the dependent variable is very limited and if the value is close to 1, it means that the independent variables provide almost all the information needed to predict the dependent variables.

Adjusted R Square is the value of R Square that has been adjusted, this value is always smaller than R Square and this number can have a negative value. Regression with more than two independent variables used Adjusted R Square as the coefficient of determination. Therefore, the researcher will use Adjusted R Square to assess the coefficient of determination test

#### Multiple Linear Regression Analysis

The test model used to test the hypothesis in this study uses multiple linear regression analysis. Multiple linear regression technique is used to determine the functional relationship between the dependent variable (Liquidity) associated with two or more independent variables (Receivable Turnover and Cash Turnover).

#### Hypothesis Test (t Test)

This test aims to show how far the independent variables individually explain the variation of the dependent variable (Ghozali, 2013). This test is carried out using a two-tailed test, which is significant at the 0.50 level ( $\alpha=5\%$ ). If the significant value  $> 0.05$  then the hypothesis is rejected. In the t-test, it can also be seen that the coefficient value shows how much each independent variable explains the dependent variable, as well as positive or negative effects based on positive or negative signs on the coefficients.

## 4.0 RESULTS AND DISCUSSION

The object of this research is the quarterly financial statements of CV Kurnia Jaya Mandiri Pekanbaru from 2010 - 2017. From the observations in the financial statements of CV Kurnia Jaya Mandiri Pekanbaru, there is a population of 32 financial statements. The following table describes descriptive statistics in the study as follows:

**Table 1. Descriptive Statistics Description of Accounts Receivable Turnover (ART)**

MONTH	2010	2011	2012	2013	2014	2015	2016	2017	Average
Jan – Mar	5.02	1.58	3.12	2.81	2.99	2.49	4.11	4.94	3.38
Apr – Jun	3.80	2.10	2.65	2.53	2.70	2.72	3.82	5.10	3.18
Jul – Sep	4.68	2.42	2.83	2.88	3.11	2.89	3.95	5.25	3.50
Oct - Dec	2.84	2.86	2.86	2.73	2.77	2.85	4.65	3.65	3.15
Max	5.02	2.86	3.12	2.88	3.11	2.89	4.65	5.25	3.50
Min	2.84	1.58	2.65	2.53	2.70	2.49	3.82	3.65	3.15
Average	4.09	2.24	2.87	2.74	2.89	2.74	4.13	4.74	3.30

Source: Processed Data (2020)

The results of descriptive statistical research show that the highest average receivables turnover variable is in 2017 and the lowest is in 2011. However, when viewed from the average quarterly accounts receivable turnover, the highest is in July – September for the lowest receivables turnover in October – December.

**Table 2. Descriptive Statistics Description of Cash Turnover (CT) Data**

MONTH	YEAR								Average
	2010	2011	2012	2013	2014	2015	2016	2017	
Jan - Mar	4	52	3	5	12	29	33	44	22.75
Apr - Jun	4	48	2	5	11	27	31	39	20.88
Jul - Sep	5	44	2	5	13	29	30	45	21.63
Oct - Dec	9	6	3	7	19	26	38	56	20.50
Max	9.00	52.00	3.00	7.00	19.00	29.00	38.00	56.00	22.75
Min	4.00	6.00	2.00	5.00	11.00	26.00	30.00	39.00	20.50
Average	5.50	37.50	2.50	5.50	13.75	27.75	33.00	46.00	21.44

Source: Processed Data (2020)

The results of descriptive statistical research show that the highest average cash turnover variable is in 2017 and the lowest is in 2012. However, when viewed from the average quarterly accounts receivable turnover, the highest is in July - September for the lowest accounts receivable turnover in October - December.

**Table 3. Descriptive Statistics Description of Quick Ratio (QR) Data**

MONTH	YEAR								Average
	2010	2011	2012	2013	2014	2015	2016	2017	
Jan - Mar	139	148	119	119	101	96	68	73	107.88
Apr - Jun	117	121	109	101	82	88	66	78	95.25
Jul - Sep	106	110	82	88	82	74	64	75	85.13
Oct - Dec	175	164	275	123	76	84	61	71	128.63
Max	175.00	164.00	275.00	123.00	101.00	96.00	68.00	78.00	128.63
Min	106.00	110.00	82.00	88.00	76.00	74.00	61.00	71.00	85.13
Average	134.25	135.75	146.25	107.75	85.25	85.50	64.75	74.25	104.22

Source: Processed Data (2020)

The results of descriptive statistical research show that the highest average quick ratio variable is in 2012 and the lowest is in 2016. However, when viewed from the quarterly average quick ratio, the highest is in October - December for the lowest quick ratio is in July - September.

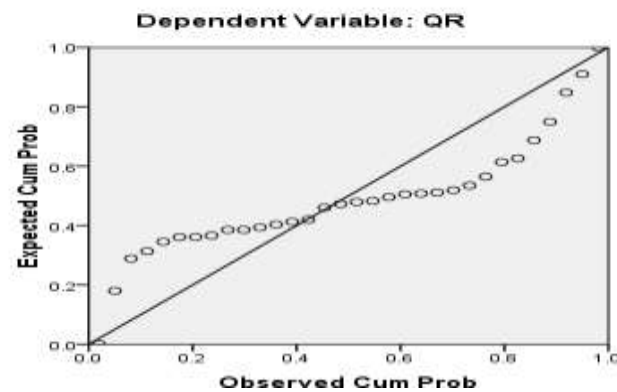
### Classic Assumption Test

The test is carried out to assess whether in a linear regression model there are problems with classical assumptions. The classical assumption test consists of several tests that is:

### Normality Test

A normality test is used to test whether the regression model of the two independent variables and dependent have a normal distribution or not (Ghozali. 2013). The method used to determine the normality of the regression model is to look at the normal probability plot and the one sample Kolmogorov - Smirnov test. Here's a picture of normality on the model:

Normal P-P Plot of Regression Standardized Residual



Source: SPSS Processed Results (2020)

Figure 2. Normal P-Plot Regression Standardized Residual

Based on 1-Smirnov. Provided that if the significance value  $> 0.05$  then the data is normally distributed. The results of the One-Sample Kolmogorov-Smirnov Z test for the Liquidity variable (Y) is 1,246 with Asymp. Sig (2-tailed) 0.090  $> 0.05$ . It means normally distributed data so that the sample data is good and feasible for

Table 4. Multicollinearity Test Results

No	Variable	Tolerance	VIF	Information
1	Accounts Receivable Turnover	0.985	1.015	Research can be continued
2	Cash Turnover	0.985	1.015	Research can be continued

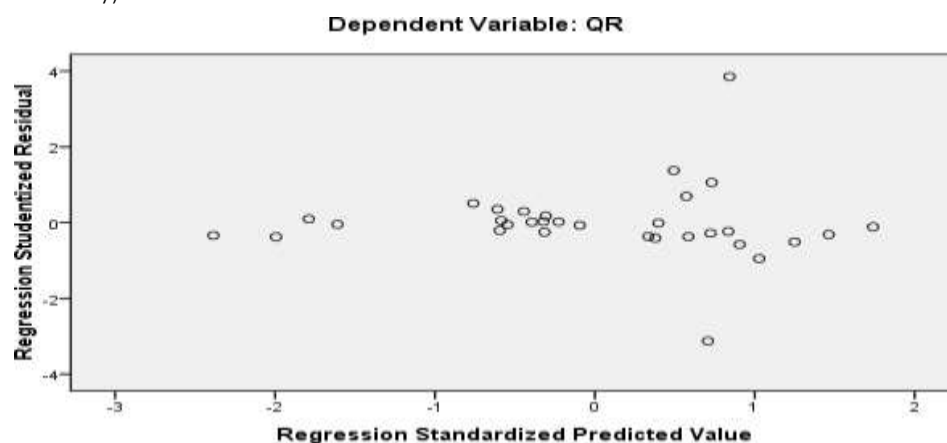
Source: SPSS Processed Results (2020)

### Multicollinearity Test

From the results of testing the regression model obtained results for each variable. From table 4 above, it can be seen that all independent variables (receivable turnover and cash turnover) have a Variance Inflation Factor (VIF) value of  $< 10$ . This means that the regression model of this study is free from symptoms of multicollinearity and can be used in this study.

### Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation (Ghozali, 2013). Detection of the presence or absence of heteroscedasticity can be done by looking at the presence or absence of a certain pattern on the scatterplot graph between ZRESID and ZPRED where the Y axis is the Y that has been predicted and the X axis is the residual (Y predicted – Y actually) that has been studentized.



Source: SPSS Processed Results (2020)

Figure 3. Heteroscedasticity Test

Based on Figure 3, it can be seen that there is no clear pattern and the points spread above and below point 0 on the Y axis. So that there is no heteroscedasticity, the research can be continued.

### Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period  $t$  and the confounding error in period  $t-1$  (previous) (Ghozali, 2013). The method used to test the autocorrelation is the Durbin-Watson test (D-W test). From the results of the SPSS test, the DW value is 2,942. Then, from the durbin-watson table with  $k = 2$  and  $n = 32$ , we get  $dl = 1.3093$  and  $du = 1.5736$ . So to see whether there is an autocorrelation or not, the calculation  $4 - du = 4 - 1.5736 = 2.4264$  and  $4 - dl = 4 - 1.3093 = 2.6907$  is used. Based on this value, the Durbin-Watson value is between  $du = 1.5736$  and  $4 - du = 2.4264$  ( $4 - dl < d < 4$ ), then it can be stated that there is no negative autocorrelation in the regression equation in this study.

### Model Test (F Test)

According to Ghozali (2013), the F Statistical Test basically shows whether all independent variables or independent variables included in the influence model jointly affect the dependent variable or the dependent variable. If the F value is significant at the 5% probability level. It can be said that all independent variables affect the dependent variable or if the F value is significant above 5%, it is said that all independent variables do not affect the dependent variable. Based on the results of the F test, it shows that the significance level is  $0.904 > 0.050$  and  $F_{count} < F_{table}$  ( $0.101 < 3.33$ ). so it can be concluded that the independent variable simultaneously affects the dependent variable so that it is used in research.

### Coefficient Determination (R2)

According to Ghozali (2013) the coefficient of determination ( $R^2$ ) is a tool to measure how far the model's ability to explain the variation of the dependent variable. Adjusted R Square is the value of R Square that has been adjusted. This value is always less than R Square and this number can have a negative value. Regression with more than two independent variables used Adjusted R Square as the coefficient of determination. Therefore, the researcher will use Adjusted R Square to assess the coefficient of determination test. Based on the test results, the Adjusted R Square value of 0.062 (6.2%) means that the independent variable, namely receivables turnover and cash turnover, together has an influence on the dependent variable, namely liquidity of 6.2%. while the remaining 93.8% is influenced by other factors outside of the variables in this study.

### Multiple Linear Regression Analysis

Multiple linear regression analysis is a linear regression model in which the dependent variable is linear from several independent variables. This multiple linear regression analysis was used to test the effect of receivables turnover and cash turnover on liquidity. From the results of the linear regression test, a linear regression equation was formed of  $Y = -2.603 + 1.645 X_1 - 0.231 X_2$ . It can be explained that the receivables turnover variable has a positive influence while the cash turnover has a negative effect, which means that if the receivables turnover increases, liquidity will also increase, but if the cash turnover increases, the liquidity will decrease.

### Partial Regression Coefficient Significance Test (t-test)

The t statistic test is used to show how far the explanatory or independent variables individually explain the variation of the dependent variable (Ghozali, 2013). This test is carried out for partial variable testers with a 5% probability level. If the probability level is less than 5% then the hypothesis is accepted.

Table 5. Partial Significant Test

Variable	Tcount	T table	Sig.	Alpha	Information
Accounts Receivable Turnover (X1)	0.169	2.045	0.867	0.05	No Significant Effect
Cash Turnover (X2)	-0.433	2.045	0.668	0.05	No Significant Effect

Source: Research Results (Processed Data)

The results of the t-test show that receivables turnover and cash turnover partially have no significant effect on liquidity at CV Kurnia Jaya Mandiri Pekanbaru.

### Effect of Accounts Receivable Turnover on Liquidity

According to Kasmir (2012) Accounts receivable turnover is a ratio used to measure how long it takes to collect receivables for a period or how many times the funds are invested in receivables during one period. Thus, it can be seen that the higher the receivables turnover ratio indicates that the capital used by the company is more



efficient. From the research results show that. Accounts Receivable Turnover (PP) variable has no significant effect on Liquidity. This can be seen from the descriptive analysis data of receivables turnover from 2010 – 2017 which tends to increase. While the quick ratio from 2010 to 2017 tends to decrease. So it can be concluded that the receivables turnover has increased, the quick ratio will not increase and vice versa. The results of this study are in accordance with Lestari's research (2016) where the results of which research state that the receivables turnover variable does not have a significant effect on liquidity. However, it is different from the results of Simamora's (2007) research where the results of the study show that receivables turnover has a positive and strong effect on liquidity.

#### Cash Turnover against Liquidity

According to Riyanto (2008). Cash turnover is to determine the efficiency or not the use of cash in the company. The comparison between sales and the average amount of cash illustrates the cash turnover rate. The cash turnover rate is a measure of the efficiency of the use of cash by the company. According to Kasmir (2012) suggests that the effect of cash turnover on liquidity is: "One of the benefits of the liquidity ratio is to measure how much cash is available to the company to pay debts or company obligations". This means that if the cash available in the company is large, the company is able to meet its short-term obligations. The research results show that. The cash turnover (CT) variable has no significant effect on Liquidity. This can be seen from the descriptive analysis data of cash turnover from 2010 – 2017 which tends to increase. while the quick ratio from 2010 to 2017 tends to decrease. So it can be concluded that the cash turnover has increased, the quick ratio will not increase, and vice versa. The results of this study are in accordance with Astuti's research (2014) where the results of which research state that cash turnover does not have a significant effect on liquidity. However, it is different from the results of Pujiati's (2014) research where the results of the study show that cash turnover has a significant effect on liquidity.

## 5.0 CONCLUSION

Based on the results of research and discussion as well as a description of the previous chapters. it can be concluded that receivables turnover and cash turnover have no significant effect on liquidity at CV Kurnia Jaya Mandiri Pekanbaru. Suggestions that can be used as input and criticism from researchers to companies are: (1) The company must be able to maintain the company liquidity well because the high liquidity owned by the company does not mean the company is in good condition. Therefore, the company must maintain its cash flow. (2) Companies are expected to continue to pay attention to and increase the volume of credit sales. tighten credit payment terms. Because if there are often uncollectible accounts, it will gradually cause the company to suffer losses. (3) For the company is also expected to always control the flow of cash in and cash out so that the efficiency of the use of cash can be increased. (4) For further researchers who want to research related factors that affect liquidity, it is recommended to add financial ratios or use other factors that can affect liquidity and can also be done by adding samples so that different and more complex conclusions are obtained.

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