

# THE EFFECT OF CASH TURNOVER, RECEIVABLES TURNOVER AND INVENTORY TURNOVER ON LIQUIDITY IN CHEMICAL SUBSECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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## ABSTRACT

This study aims to determine whether there is an influence between cash turnover, accounts receivable turnover and inventory turnover on liquidity in chemical subsector companies listed on the Indonesia Stock Exchange either partially or simultaneously. This research was conducted at the Indonesia Stock Exchange with a sample of chemical subsector companies and sampling using a purposive sampling technique. This study uses descriptive analysis, multiple regression analysis, and the classical assumption test which consists of a normality test, multicollinearity test, heteroscedasticity test, and hypothesis testing is done by partial testing (t test), simultaneous test (f test) and the coefficient of determination with a test tool SPSS. The results of research conducted partially show that cash turnover has no significant effect on liquidity; accounts receivable turnover has a significant effect on liquidity; and Inventory turnover has a negative and significant effect on liquidity. While simultaneously cash turnover, accounts receivable turnover and inventory turnover have a significant effect on liquidity.

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## 1. INTRODUCTION

The manufacturing industry contributed the most to the increase in Indonesia's economic growth which reached 7.07% in the second quarter of 2021. This sector was the highest source of growth, at 1.35%. In this period, the manufacturing sector itself recorded growth of 6.91% despite the pressure caused by the Covid-19 pandemic. (Industry, 2021). The chemical industry is one of the sectors that get priority for government development, because this industry can make a significant contribution to the national economy, based on the Making Indonesia 4.0 roadmap. Chemicals are strategic commodities used as raw materials in various other industrial sectors. Based on data from the Central Statistics Agency (BPS), the chemical and chemical goods industry sectors showed positive performance.

A company is said to be liquid if it can fulfill its short-term obligations according to its maturity date. The company needs liquidity as collateral to meet its short-term obligations. Several measures, including the use of a current ratio or a current ratio can measure a company's liquidity position. The company's current ratio shows whether it can repay its short-term debt. The company's ability to meet short-term obligations can be seen from the level of cash flow. Cash turnover can be seen from the ratio value to assess cash availability. A large amount of cash reflects the company's high liquidity which means excess cash resulting in low cash turnover. Another current asset that is easily converted into cash is receivables. Receivables turnover is the company's ability to handle credit sales transactions with its policies. Another factor affecting the liquidity of the company is inventory. Manufacturing companies in particular, utilize inventory, one of the most active elements of current assets, in their business operations. The ratio that reflects the length of time of conversion of receivables into cash is the receivables turnover ratio.

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Cash is reused for the operation of the enterprise, and the receivables turnover ratio increases, which will soon turn into cash, thereby reducing the risk of loss for the company. Cash turnover, receivables turnover and inventory turnover are critical for companies because these ratios can be used to measure how efficiently working capital is used to avoid defaults on short-term debt.

Cash is cash that can be used to finance a company's operations (Zaki Baridwan, 2004:84). Cash is the most liquid asset, which can be used as a means of payment that is ready and free to be used to finance the company's general activities.

According to Riyanto (2011: 95) in (Sariningsih, 2018), cash turnover is the ability of cash to generate income so that it can be seen how many times cash rotates in a certain period. This ratio is to determine the speed of cash turnover in a certain period and compared to the following year whether there is an increase in cash turnover or vice versa.

The higher the cash turnover rate means the more efficient the level of cash use and vice versa the lower the turnover rate the more inefficient, because the more money stops or is not used. The cash turnover rate shows the speed of change back of current assets into cash through sales, the higher the level of cash turnover, receivables and inventories indicates a high sales volume.

According to Riyanto (2010:95) in Elvi and Joana (2018: 181), cash turnover is a period of cash spinning starting when the cash is invested in working capital whose liquidity level is the highest. According to Riyanto (2001), the higher the cash turnover, the better the efficiency of using cash, and the greater the profit obtained .

Receivables are claims against other parties in the form of money, goods or services sold on credit. If referring to the Big Indonesian Dictionary (KBBI), the definition of receivables is money lent (which can be billed from someone) or company bills to customers that are expected to be repaid within a maximum of one year from the date of issuance of the bill. According to Primatua (2017: 149) in the study (Maulana & Karim, 2021) explained that: Receivables turnover is "The receivables turnover ratio shows the company's ability to realize receivables into cash or how much uncollectible sales are". The explanation measures how much the company's receivables turnover realizes into cash. Riyanto (2010: 90) in the study (Saragih & Saragih, 2019) stated that the level of *receivable turn over* can be known by dividing the amount of credit sales over a certain period by the average amount of receivables. According to cashmere (2012), the higher the receivables turnover ratio indicates that the working capital invested in receivables is lower and of course this condition for the company is getting better. On the contrary, if it gets lower there is over investment in receivables.

Inventory is one type of important asset in manufacturing or trading companies. Inventory is goods obtained for resale or materials to be processed into finished materials or finished goods to be sold or goods to be used by Lintas (2021:105-106). Inventory turnover is a ratio used to measure several times the funds planted in this inventory rotate in one period. This ratio is known as *the inventory turn over* ratio. Inventory turnover is a ratio that shows several times the number of inventory items replaced in one year. The way to calculate the inventory turnover ratio is to compare sales with inventory values. According to Subramanyan (2014:45) in research (Mayasari et al, 2016). The higher the inventory turnover, the greater the company will make a profit because inventory sold in cash or credit will later increase the company's cash so that the incoming cash can be used to buy inventory and fulfill its short-term obligations. Liquidity describes a company's ability to fulfill its short-term obligations smoothly and on time so that liquidity is often referred to as *short-term liquidity* (Fahmi, 2020: 174). The liquidity ratio used in this study is the *current ratio* . The current ratio can assess liquidity by comparing current assets and current liabilities. Current ratios are often used to assess liquidity because they indicate the extent to which short-term creditor needs are met by assets that are expected to turn

into cash at maturity . The higher the current ratio, the higher the company's ability to meet its short-term obligations. The simple concept of a current ratio is that the company must have enough cash to cover its current liabilities

## 2. METHOD

The type of research used in this study is causal associative with quantitative approach methods. According to Sugiyono (2017: 63) states that associative is a research question that asks the relationship between two or more variables. A causal relationship is cause-and-effect. According to Sugiyono (2017: 23) quantitative methods can be interpreted as research methods based on the philosophy of positivism, used to research on specific populations or samples. Data collection uses research instruments, data analysis is quantitative or statistical, to describe and test predetermined hypotheses

## 3. RESULT AND DISCUSSION

**Table 1.** Multiple Linear Regression Test

Type	Coefficients <sup>a</sup>		Standard ized Coeffie nts t	Sig.
	Unstandardized Coefficients B	Std. Error		
(Constant)	3,869	,665	5,818	,000
Cash Turnover	-,196	,118	-,245	,108
Receivables Turnover	1,131	,199	,956	,000
Inventory Turnover	-1,733	,450	-,681	,001

a. Dependent Variable: Liquidity

From the results of the analysis above, the multiple liner regression model obtained is:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon$$

$$CR = 3,869 + (-0.196) x_1 + 1.131x_2 + (-1,733)x_3 + \varepsilon$$

Then it is simplified to:

$$CR = 3,869 - 0.196x_1 + 1.131x_2 - 1.733x_3$$

The regression equation above can be interpreted as follows:

- 1) The constant (a) is 3.869. This means that if the variable cash turnover is - 0.196, the receivables turnover is 1.131 and the inventory turnover is -1.733, the liquidity is 3.869. This result is significant at alpha 5%.
- 2) The  $\beta_{\text{coefficient } 1}$  is -0.196 This means that assuming the turnover of receivables and the turnover of inventory of fixed value (unchanged), every increase in cash turnover of 1 unit will increase to liquidity by -0.196. This result was insignificant at alpha 5% of the t test results.
- 3) The  $\beta_{\text{coefficient } 2}$  is 1.131 This means that assuming cash turnover and inventory turnover are of fixed value (unchanged), then every increase in receivables turnover of 1 unit will increase to liquidity by 1,131. This result was significant at alpha 5% of the t test results.

- 4) The coefficient of  $\beta_3$  is -1.733. This means that assuming cash turnover and receivables turnover are of fixed value (unchanged), then every increase in inventory turnover of 1 unit will increase liquidity by -1,733. This result was significant at alpha 5% of the t test results.

The coefficient of positive value is variable turnover of receivables with liquidity, so an increase in receivables turnover will increase liquidity. The coefficient is negative between cash turnover and receivables turnover with liquidity so that liquidity will decrease.

**Table 2. Coefficient of Determination Test**

Model	Summary	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	a	,760	,577	,528	1,9615
					2,075

a. Predictors: (Constant), Inventory Turnover, Cash Turnover, Receivables Turnover

b. Dependent Variable: Liquidity

Based on the table above, the *Adjusted R Square* value of the coefficient of determination of 0.528 or equal to 52.8% is obtained. So the variables of cash turnover, receivables turnover and inventory turnover affected liquidity by 52.8%, while the remaining 47.2% was influenced by other factors or other variables outside this study. So according to the decision making, the coefficient of determination in this study has a moderate influence.

**Table 3. Partial Test (Uji t)**

Coefficients <sup>a</sup>					
Type	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	
(Constant)	3,869	,665	5,818	,000	
Cash Turnover	-,196	,118	-,245	,108	
Receivables Turnover	1,131	,199	,956	,000	
Inventory Turnover	-1,733	,450	-,681	,001	

a. Dependent Variable: Liquidity

Based on the table above, it can be concluded as follows :

1. The variable Perputaran K as with a calculated t value < t table is  $2121.663 < 2.05553$  with a significant value of  $0.108 > 0.05$ , with a significant value of  $0.108 > 0.05$ . Thus H1 is rejected which means that the K Us Turnover variable has no significant effect on Liquidity.

- The Pvariable with a calculated t value of  $> t$  is  $5.691 > 2.05553$  with a significant value of  $0.000 < 0.05$ . Then H2 is accepted, which means that the variables P and Piutang significantly affect Liquidity.
- The variable P erputaran P preparation with a calculated t value  $> t$  table is  $\sqrt{2012} 3.851 > 2.05553$  with a significant value of  $0.001 < 0.05$ . Then H3 is accepted, meaning that the variable Inventory Turnover has a negative and significant effect on Liquidity.

**Table 4.** Simultaneous Stest (Uji F)

ANOVA <sup>a</sup>		Sum of	Df	Mean	F	Sig.
Type		Squares		Square		
1	Regr essio n	136,561	3	45,520	11,83	,000 <sup>b</sup>
	Resi dual	100,044	26	3,848		
	Total	236,604	29			

a. Dependent Variable: Liquidity

b. Predictors: (Constant), Inventory Turnover,  
Cash Turnover, Receivables Turnover

Based on the table above, it can be concluded that the F value of calculating  $>$ the F of the table is  $11,830 > 2.74$ , with a significant value of  $0.000 < 0.05$ , then H4 is accepted which means that the Variable Cash Turnover, Receivables Turnover and Inventory Turnover simultaneously have a significant effect on Liquidity.

### Discussion

#### 1. The Effect of Cash Turnover on Liquidity

Based on the results of partial tests that have been carried out, the value of the value is known t calculate  $< t$  table which is  $\sqrt{2012} 1.663 < 2.05553$  with a significant value of  $0.108 > 0.05$ , with a significant value of  $0.108 > 0.05$ . Then it can be concluded that H1 is rejected which means that the K Turnover variable has no significant effect on Liquidity. This means that the increase in cash does not directly impact liquidity. This shows that the company's high cash can be used as a company operation with current assets (Hidayat, 2018).

#### 2. Effect of Receivables Turnover on Liquidity

Based on the results of partial tests that have been carried out, it is known that the value of the calculated t value  $> t$  table is  $5.691 > 2.05553$  with a significant value of  $0.000 < 0.05$ . So it can be concluded that H2 is accepted, which means that the P variable and Piutang significantly affect Liquidity. *Account Receivable Turnover* is intended to measure the liquidity or activity of a company's receivables. The high rate of receivables turnover reflects refund activity embedded in receivables into cash back. With the return of receivables into cash, it can be used again by the company for credit sales and re-lending (Trisnayanti, 2020).

#### 3. Effect of Inventory Turnover on Liquidity

Based on the results of partial tests that have been carried out, it is known that the value of t count  $> t$  table is  $\sqrt{2012} 3.851 > 2.05553$  with a significant value of  $0.001 < 0.05$ . So it can be concluded that H3 is accepted which means that the variable Inventory Turnover has a negative and significant effect on Liquidity. This means that the greater the turnover

rate of merchandise inventory in the company, the smaller the liquidity level. This means that an increase in inventory turnover will reduce the use of liquidity in a company (Tina, Hadi, and Suryani, 2021).

4. Effect of Cash Turnover, Receivables Turnover and Inventory Turnover on Liquidity. Based on the results of partial tests that have been carried out, it is known that the F value of calculating >the F of the table is  $11,830 > 2.74$ , with a significant value of  $0.000 < 0.05$ , it can be concluded that H<sub>4</sub> accepted which means that the Variable Cash Turnover, Receivables Turnover and Inventory Turnover simultaneously have a significant effect on Liquidity. The higher cash turnover rate, receivables turnover and inventory turnover indicate high sales volume

#### 4. CONCLUSION

Based on the results of the analysis and discussion that have been explained earlier, the conclusions in this study were obtained as follows The Kus turnover shows no significant effect on Liquidity in chemical sub-sector companies listed on the Indonesia Stock Exchange. The receivables turnover shows a significant effect on liquidity in chemical sub-sector companies listed on the Indonesia Stock Exchange. Inventory turnover significantly affects liquidity in chemical sub-sector companies listed on the Indonesia Stock Exchange. Cash Turnover, Receivables Turnover and Preparation P Turnover show simultaneous means of significant impact on Likuiditas in chemical sub-sector companies listed on the Indonesia Stock Exchange.

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