

Effect of Accounts Receivable Turnover and Inventory Turnover Against Profitability At PT. Kimia Farma (Persero) Tbk. Period 2011 – 2020

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Abstract : The purpose of this study was to determine the effect of receivables turnover (RTO) and inventory turnover (ITR) on profitability (ROA). The method used in this study quantitatively from the conclusions of PT. Kimia Farma (Persero) Tbk. During the period 2011-2020, the survey used descriptive analysis, classical hypothesis testing, predictive multiple regression, predictive hypothesis testing, and coefficient of determination. The results of the study are as follows that accounts receivable turnover (RTO) has no partial and insignificant effect with $t_{count} 1.166 < t_{table} 2.44691$ and significant $0.288 > 0.05$ on profitability (ROA) and Inventory Turnover (ITR) partially there is a positive relationship and has no effect and is not significant where $t_{count} 0.149 < t_{table} 2.44691$ with a significant value of $0.887 > 0.05$ on profitability (ROA). Simultaneously Accounts Receivable Turnover and Inventory Turnover have no effect where $F_{count} 1.563 > F_{table} 5.14$ with a significant $0.284 > 0.05$. From the results of the Determination Test, it is shown by an R-Square value of 0.343 which means the dependent variable is explained by the independent variable of 34.3% which means 34.3% of Profitability is explained by Accounts Receivable Turnover and Inventory Turnover, while 65.7% is explained by other variables that not researched.

Keywords: Accounts Receivable Turnover, Inventory Turnover and Profitability

INTRODUCTION

With the corona virus outbreak or can be called the Covid-19 Pandemic which developed from 2020 to the present (2022), has paralyzed the economy in Indonesia and even the world, Indonesia continues to make various efforts to improve in accelerating various social protection programs in the face of the post-crisis crisis. this pandemic. This social protection program is not only to protect the poor from financial shocks, but the number of low- and middle-income groups at risk of poverty in the following years is increasing. In addition, SMEs also receive government support as part of their efforts to continue to grow in the post-Covid-19 recession and limited community activities. Indonesia's development partners stand ready to support this effort. (Kusumandari, 2021).

The Covid-19 pandemic has had a huge impact on the economic, social and cultural sectors, and Indonesia has also been affected. The first impact is the weakening of household consumption or the weakening of people's purchasing power. The second impact is the uncertainty of when the coronavirus will end, which has resulted in the investment sector weakening, resulting in the cessation of business. The third impact of the weakening economy causes commodity prices to decline, so the government takes quick actions such as vaccination programs and the national economic recovery program which can also be called BLT (Direct Cash Assistance), SMEs (Small and Medium Enterprises), MSMEs (Micro, Small and Medium Enterprises). (Fikri, 2021).

In relation to how the company can survive in maintaining its existence, the researcher tries to examine the company PT. Kimia Farma (Persero) Tbk, which is a state-owned company in the health sector with phenomenon of using financial ratios, namely Accounts Receivable Turnover and Inventory Turnover to Profitability with the following phenomena:

Table 1. The phenomenon of PT. Kimia Farma (Persero), Tbk. (ROA)

No	Year	RTO (%)	ITR (%)	ROA (%)
1	2011	633.25	579.82	9.57
2	2012	605.94	518.83	9,91
3	2013	586,33	521,79	8,58
4	2014	553,53	680,72	8,56
5	2015	597,69	464,93	7,57
6	2016	616,45	461,80	5,89
7	2017	501,21	363,54	5,44
8	2018	512,65	311,80	6,59
9	2019	444,95	253,38	0,09
10	2020	312,15	239,36	0,12

Source : research data 2022

Based on table 1 the phenomenon above based on the RTO variable in 2011 to 2012 there was a decrease from 633.25% to 605.94%, for 2012 to 2013 RTO decreased from 605.94% to 586.33% and continues to decline until 2014 and increased to 597.69% and 616.45% in 2015 and 2016 than in 2017 decreased to 501.21%, rose again in 2018 to 512.65% and continued to decline until 2020 by 312.15%, for Variable ITR decreased from 579.82% to 518.83%, increased to 521.79% and 680.72% in 2013 and 2014 and then decreased in 2015 to 464.93% until 2020 to 239.36 % while the ROA variable increased from 9.57% to 9.91%, in 2013 to 2019 it continued to decline from 8.58% to 0.09% and finally in 2020 it increased to 0.12%

The problem is caused by a large number of requests so PT. Kimia Farma (Persero) Tbk requires funds for production and operational costs while there are many receivables that cannot be collected including BPJS Health, health services, government hospitals, and TNI-Polri hospitals from 2019 to 2020. So most suppliers implement policies of advance payment or COD (Cash On Delivery) which suppresses the cash flow of PT. Kimia Farma (Persero) Tbk. From these problems, the authors want to conduct research with the title: **"INFLUENCE OF RECEIVABLES TURNOVER**

AND INVENTORY TURNOVER ON PROFITABILITY IN PT. KIMIA FARMA (PERSERO) Tbk. PERIOD 2011-2020”

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Accounts Receivable Turnover

This can be checked with the turnover to check the smoothness of accounts receivable and to measure whether the investment in receivables is good when receiving receivables. These receivables are part of working capital and continue to rotate in the working capital turnover chain.

"According to Kasmir (2010: 247) states that receivables turnover is a ratio used to measure how long it takes to collect receivables in one period or how many times the funds invested in these receivables rotate in one period".

As the formula formulated by Bambang Riyanto (2010: 91) that the level of receivables turnover (receivable turnover) can be known by the formula for the number of credit sales during a certain period divided by the average number of receivables (average receipts) in that period.

$$\text{Perputaran Piutang} = \frac{\text{Penjualan Kredit Bersih}}{\text{Rata - Rata Piutang}}$$

$$\text{Rata-Rata Piutang} = \frac{\text{Piutang Awal} + \text{Piutang Akhir}}{2}$$

Inventory Turnover

Inventory is the main commodity of a trading company. Inventory is included in the current assets of the business, which plays an important role in the profitability of the business. In general, that inventory is used for the preparation of commodities that are sold. In a trading company, inventory is goods purchased for resale without changing the goods themselves.

According to V Wiratna Sujarweni (2017: 63) Inventory is the company's ability to invest in the circulation of its funds within a certain period, or liquidity in the form of inventory.

$$\text{Inventory Turnover} = \frac{\text{Harga Pokok Penjualan}}{\text{Rata-rata Persediaan}}$$

$$\text{Rata-Rata Persediaan} = \frac{(\text{Persediaan Awal} + \text{Persediaan Akhir})}{2}$$

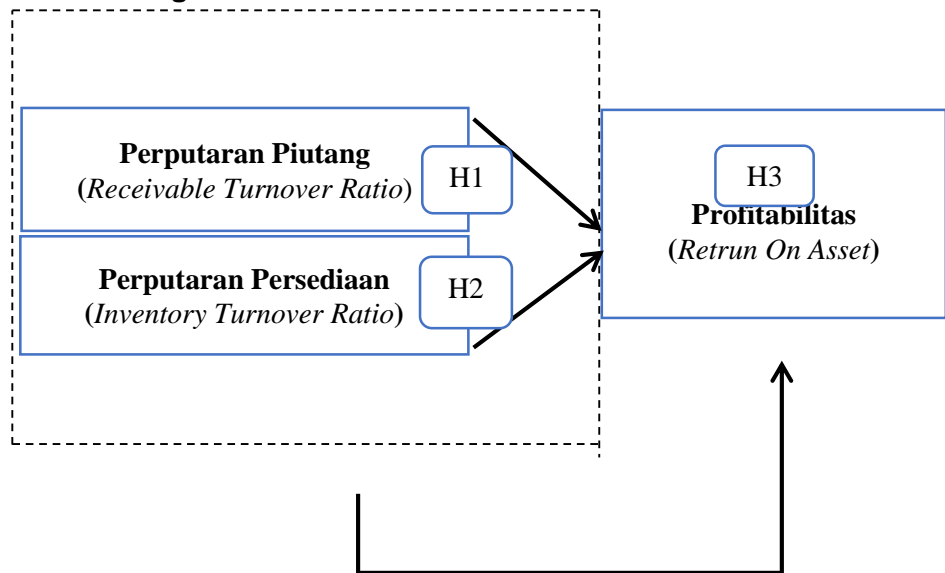
Profitability

According to Hery (2016: 192), the rate of return is a ratio to assess the company's ability to generate profits from normal operations. In addition to knowing the ability of a company to generate profits over a certain period of time, this indicator also aims to measure the effectiveness of management in carrying out business activities. The profitability ratio is a ratio that represents all available skills and resources, namely the company's ability to generate profits from the skills and resources obtained from sales activities, resource utilization, production, and capital expenditures.

Return on total assets (ROA) is one indicator of profitability, and this ratio is a comparison between net income and total assets. This key figure shows asset sales in terms of sales volume. The higher this ratio, the better. This means that assets can be delivered faster and make a profit. It can be formulated for the calculation of ROA as follows:

$$ROA = \frac{\text{Laba Bersih}}{\text{Total Aset}}$$

Framework for thinking



Source : research data 2022
Figure 1. Thinking Framework

- According to Figure 1, the framework for the hypothesis (temporary conjecture) is:
- Hypothesis 1: Allegedly Accounts Receivable Turnover has an effect on profitability at the company PT. Kimia Farma period 2011 - 2020
 - Hypothesis 2: Allegedly Inventory Turnover has an effect on profitability at the company PT. Kimia Farma period 2011 - 2020
 - Hypothesis 3: Allegedly Accounts Receivable Turnover, Inventory Turnover affect the profitability of the company PT. Kimia Farma period 2011 – 2020.

METHODS

The population and sample in this quantitative research are inseparable and interrelated. In simple terms, the sample is part of the population studied and is representative of the members of the population because the results can be generalized into conclusions. In this survey, the population analyzed is the financial statements of the company as a whole, PT Kimia Farma (Persero) Tbk, by taking a sample of the annual accounting of the company PT Kimia Farma (Persero) Tbk. For 10 periods from 2011-2020. This sampling method is a targeted sampling method.

The type of data to examine the problems in this study is quantitative data, including numerical data with units of account that can be calculated mathematically. The information used is secondary data. This means that data is collected in a commercial format and collected and processed by other parties. The data for this survey is taken from the index exchange. y a i t u PT Kimia Farma (Persero) Tbk. For 10 periods from 2011-2020. ", which uses the official website of BUMN (State Owned

Enterprises), data is also obtained from Informasi lain, among others, from jurnal, *textbooks*, and *n* internet which are in accordance with several types of *data* yang collected on penelitian ini, The data collection method used is documentation. The data used in this research technique are: Statistical Analysis, Descriptive Analysis, Classical Assumption Test, Hypothesis Testing, Simple Linear Regression Test, Multiple Linear Regression Test, Correlation Coefficient Test, and Coefficient of Determination Test.

RESULT AND DISCUSSION

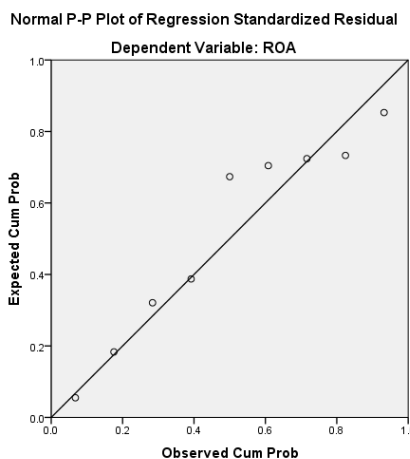
Table 2
Descriptive Statistics Test Results

Descriptive Statistics			
	mean	Std. Deviation	N
ROA (Y)	5258627035.33	3980220875.453	9
RTO (X1)	56133.3333	6298.52201	9
ITR (X2)	4254909954.2222	1948694786.45074	9

Source: Secondary Data processed 2022

According to table 2 above, the results of the Predictive statistical test are shown in the Accounts Receivable Turnover variable with an average value of 56133.3333 and a standard deviation of 6298.52201, while the Inventory Turnover variable with an average value of 4254909954.2222 and a standard deviation of 1948694786.45074. The company's profitability variable has an average value of 5258627035.33 and a standard deviation of 3980220875.453.

Figure 2
Normality test



Source: Secondary Data processed 2022

Figure 2. Normality test

From Figure 2 of the normal probability plot, it can be seen that in the normal plot, the pattern of dots spreads around the diagonal and follows the direction of the diagonal. It can be said that the distribution of the regression model data is normal.

Table 3. Multicollinearity Test

Coefficients ^a								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1 (Constant)	-14340551145.101	13884792249.863		1.033	.342			
RTO	338572.605	290277.376	.536	1.166	.288	.519	1.926	
ITR	.140	.938	.068	.149	.887	.519	1.926	

a. Dependent Variable: ROA

Source: Secondary Data processed 2022

In table 3 the results of the multicollinearity test show that the tolerance is close to 1 and the VIF value for each variable is around 1-10. The result of the calculation of the margin of error shows that there is no independent variable with a margin of error below 0.10. This means that there is no relationship between the independent variables whose value exceeds 95%. VIF results are the same as no dependent variable with a VIF value greater than 10. It can be concluded that all independent variables in the regression equation model do not have multicollinearity problems, so they can be used in this study.

Table 4. Auto Correlation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.585 ^a	.343	.123	3726696906.164	2.103

a. Predictors: (Constant), ITR, RTO b. Dependent Variable: ROA

Source: Secondary Data processed 2022

Based on table 4 above, it can be seen that:

Test statistics

$$DW = 2.103$$

$$dl = 0.69715$$

$$du = 1.64134$$

$$(4-dl) = 3.30285$$

$$(4-du) = 2.35866$$

DW value lies between (du) and (4-du)

Decision

The results of the above calculation that the DW value of 2.103 lies between the values (du) and (4-du) of 1.64134 and 2.35866 ($du < DW < 4 - du$) can be said to be $1.64134 < 2.103 < 2.35866$, so concluded that there is no autocorrelation.

Multiple Linear Regression Test Analysis

Table 4. Regresi Linier Berganda

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-14340551145.101	13884792249.863		-1.033	.342		
RTO	338572.605	290277.376	.536	1.166	.288	.519	1.926
ITR	.140	.938	.068	.149	.887	.519	1,926

a. Dependent Variable: ROA

Source: Secondary Data processed 2022

Table 4 data above is formulated a regression equation that is used to determine the effect of the relationship between *Receivable TurnOver* and *Inventory TurnOver* on profitability as follows:

$$Y = a + b_1 X_1 + b_2 X_2$$

$$= -14340551145.101 + 338572.605x_1 + 0,140x_2$$

From the coefficient of the constant above, the value of -14340551145.101 is obtained. The value of this constant indicates that if the independent variable remains constant, the dependent variable is affected by -14340551145.101 Units.

T test (Parsial)

Table 5. T Test (Partial Test)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-14340551145.101	13884792249,863		-1.033	.342
RTO	338572.605	290277,376	.536	1.166	.288
ITR	.140	.938	.068	.149	.887

Source: Secondary Data processed 2022

According to table 5, the SPSS calculation results from the receivables turnover variable (RTO) X_1 with a t_{count} value of 1.166 greater than t_{table} 2.44691 then when compared with the t-value distribution table t with $= 0.05$ where $t_{count} 1.166 < t_{table} 2.44691$ then H_0 is rejected and H_a is accepted with a significant amount of $0.288 > 0.05$ then H_0 is rejected and H_a is accepted so that it can be concluded that partially there is a positive relationship and no significant effect between receivables turnover (RTO) on profitability (ROA). Meanwhile of the inventory turnover variable (ITR) X_2 with a t_{count} value of 0.149 which is smaller than a t_{table} of 2.44691 then when compared with the t value of the t distribution table with $= 0.05$ where $t_{count} 0.149 < t_{table} 2.44691$ then H_0 is rejected and H_a is accepted with a significant value of $0.887 > 0.05$ then H_0 is

accepted and H_a is rejected so that it can be concluded that partially there is a positive relationship and no significant effect between Inventory Turnover and (RTO) to Profitability (ROA).

Uji F (Simultan)

Tabel 6. Uji F (simultan)
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	43407646756624286000.000	2	21703823378312143000.000	1.563	.284 ^b
Residual	83329618982489300000.000	6	13888269830414883000.000		
Total	126737265739113580000.000	8			

a. Dependent Variable: ROA

b. Predictors: (Constant), ITR, RTO

Source: Secondary Data processed 2022

From the ANOVA test (*Analysis of Variance*) in table 6 above that the value of $F_{count} > F_{table}$ or $1.563 > 5.14$ with a significant level of $0.284 > 0.05$, it is said that Accounts Receivable Turnover (RTO) and Inventory Turnover (ITR) together equally positive and not significant effect on profitability (ROA).

Table 7. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.585 ^a	.343	.123	3726696906.164	2.103

a. Predictors: (Constant), ITR, RTO

b. Dependent Variable: ROA

Source: Secondary Data processed 2022

The test results of the coefficient of determination in table 8 can be seen that the dependent variable can be explained by the independent variable of 34.3%, in other words, 34.3 % of profitability can be influenced by Accounts Receivable Turnover and Inventory Turnover with an R Square value of 0.343, while 65 ,7% is explained by other factors not examined in this study.

CONCLUSIONS

The results of the research on the receivables turnover variable have a positive and insignificant relationship to profitability. This can be seen from the receivables turnover regression coefficient of 1.116 and a significance value of 0.288. This means that if there is an increase of 1 unit of receivables turnover, it will affect the profitability of 1,116 units. The results showed that the company's turnover variable had a thin positive linear relationship with profitability. This can be seen from the regression coefficient of the company's inventory turnover of 0.149 and significant at 0.887. This makes sense as inventory increases. One unit turnover rate of 0.149 units , which is associated with increased profitability, and in terms of research results, the independent variables (RTO and ITR) together have no significant effect on the

dependent variable (ROA) at the same time. time, and the remaining 65.7% It has an effect of 34.3% Influenced by other factors not investigated.

This research proves that PT. Kimia Farma (Persero), Tbk. If there is an increase or decrease in Accounts Receivable Turnover and Inventory Turnover, it has no direct effect on profits or profitability. With this research, the company is expected to be able to monitor more effectively in Accounts Receivable Turnover and Inventory Turnover. Decisions can be learned from this research for companies to be able to make management policy strategies in terms of Accounts Receivable Turnover and to maximize profits, inventory must be adjusted to consumer demand more selectively. Thus, companies can consider choosing potential customers so that the expected profits can be maximized and become a reference for management in making management decisions.

The results of this study will provide insight into the Effect of Accounts Receivable Turnover and Inventory Turnover on profitability. However, this study has some limitations. These limitations will provide insight and opportunities for future authors to do better research.

The sample used in this study is only related to 1 index, namely the issuer, so it is not possible for issuers to fully determine the scope and all results. For this reason, future authors will include more indexes in their surveys and link them to each other. The population used for the survey sample may use several types of entities, or other indices.

In using the research model is to determine the profitability may not be accurate and because the model is quite complex, prone to data processing errors. This allows future researchers to use other methods that are good and simple, more accurate, so as to provide relevant information. The ratio used in this study only counts two independent variables in assessing variance that can affect profitability. For this reason, future researchers can add ratios related to profitability in other research to be more accurate.

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