

## THE INFLUENCE OF INVENTORY ROUND RATIO AND ACTIVITIES ROUND RATIO OF PROFITABILITY (ROI)

Lina Nofiana<sup>1</sup>, Denok Sunarsi<sup>2</sup>  
Universitas Pamulang, Indonesia\*<sup>12</sup>

dosen02608@unpam.ac.id<sup>1</sup>, denoksunarsi@unpam.ac.id<sup>2</sup>

**Abstract:** This study aims to determine the effect of Turnover Ratio and Asset Turnover Ratio on Profitability (ROI) at PT. HM Sampoerna Tbk Period 2009-2018. The method used is explanatory research with a sample of 85 respondents. The analysis technique uses statistical analysis with regression testing, evaluation, determination and hypothesis testing. The results of this study indicate that a significant Turnover Ratio to Profitability (ROI) of 91.8%, the hypothesis test obtained a significance of 0,000 <0.05. Asset Turnover Ratio has a significant effect on profitability (ROI) of 96.3%, hypothesis testing obtained significance of 0,000 <0.05. Planning Turnover Ratio and Activation Turnover Ratio significantly to Profitability (ROI) of 96.5%, the hypothesis test obtained significance of 0,000 <0.05.

**Keywords:** Preparation Turnover Ratio, Asset Turnover Ratio, Profitability (ROI).

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### INTRODUCTION

With the development nowadays, the progress of the company today is still needed by the global economic climate. Indonesia's current economic development is indeed better compared to last year. As is known to the Indonesian people since the beginning of 1998. Following the political crisis, the era of social globalization and also free competition, presents unfavorable challenges for the Indonesian business world because the readiness to deal with the above has not been tested. But this then made Indonesia think again to improve the economy to be better and to improve again as it had been in previous years.

Since January 2000, Indonesia is expected to support development policies that can stimulate the development and development of companies in the region that can spur economic growth in the area.

By presenting regional autonomy it is expected to provide flexibility to the regions in regional development through businesses that are able to increase the active participation of the

business world and society. Additional companies engaged in general trading, they are directly related to the community which is also related to the strategy implemented to obtain orders a source of business income to obtain optimal profits.

Each company is an organization engaged in the search for profit (profit) has the goal to earn profits in every operational activity carried out by the company, so that it requires effective and efficient financial management. In this regard, income is the most important which is closely related to the small profits that the company will obtain in negotiations and determine the company in the future. To achieve these objectives, the company must use the efficiency and effectiveness of all business activities that occur within the company. By using financial statements, the role is very important in determining the valuation of a company's financial position, namely analyzing items that are on a temporary list to study the company's operations by understanding and controlling and improving management in all processes of analyzing its profit and loss statements annually.

In order to increase maximum

profit, it can be done by two ways, namely by increasing sales and also by reducing costs to the maximum extent possible. In increasing sales can be done by increasing sales volume and selling price. Meanwhile, to reduce costs can be done by maintaining or maintaining company assets or by using existing equipment as efficiently as possible. So that any reduction in costs will be able to increase company profits.

Inventory turnover at PT. HM Sampoerna Tbk has increased. This is due to where current assets are able to cover the existing inventory in the short term, therefore the company has increased. In addition to paying its obligations, PT. HM Sampoerna Tbk manages the sales results based on its assets, so that PT. HM Sampoerna Tbk requires asset turnover owned by the company, to measure asset turnover efficiently using the Total Asset Turnover measure, because asset turnover is measured by sales volume, the greater the asset turnover, the company is considered active in managing its assets.

According to Fahmi (2013) the Asset Turnover Ratio is a ratio that illustrates the extent to which a company uses its resources to support this activity is carried out very optimally with the intention of obtaining maximum results. According to Kasmir (2011), states that profitability ratios are ratios used to measure the efficiency of the use of company assets or is the ability of a company to generate profits for a

certain period to see the company's ability to operate efficiently. According to R. Agus Sartono (2010) the inventory turnover ratio is a large amount of current assets in a company. For trading companies, the supplies are called merchandise, where the merchandise is owned by the company and is directly in the form of ready to be sold in the normal business activities of the company daily. Inventory turnover ratio is a large amount of current assets in a company. For trading companies, the inventory is called merchandise, where the merchandise is owned by the company and is already in the form of ready to be sold in the normal business activities of the company's daily life.

To survive in the field of competition the management must optimize its business activities well. The purpose of a company can be viewed from an economic point of view is obtaining (profitability), as well as maintaining viability and sustainability with the company's operations. So for manufacturing companies the problem of profitability is quite important because it is used to measure the ability to generate profits that a company wants to achieve. And also to find out its effectiveness in managing the resources it has.

Therefore management of assets and inventories must be carried out as effectively and efficiently as possible, in order to increase the company's operating profit, so that the company can run continuously well.

**Table 1 PT. HM Sampoerna Tbk  
 Period 2009 - 2018**

Year	Total assets	Stock	COGS	Net sales	EAT
2009	15,403,996	8,294,903	2,283,995	8,126,923	1,058,732
2010	16,403,004	7,457,512	2,827,231	9,107,488	1,350,103
2011	20,525,123	9,802,455	5,947,829	20,621,104	1,065,585
2012	15,789,445	8,543,484	7,068,311	24,684,154	1,393,807
2013	26,247,527	15,669,906	18,507,288	66,626,123	9,945,896
2014	28,380,630	17,332,558	20,071,561	75,025,207	10,818,486
2015	27,404,594	17,431,586	20,500,062	80,690,139	10,181,083
2016	38,010,724	19,071,523	21,764,389	89,069,306	10,363,308
2017	42,508,277	19,442,023	23,854,676	95,466,657	12,762,229
2018	43,141,063	18,023,238	17,590,935	99,091,484	12,670,534

From the financial data above it can be concluded that PT. HM Sampoerna earns an unstable profit from year to year. Where in 2010 and 2012, the company experienced a decline in inventory. And in 2014 and 2015, the inventory obtained by the company was almost the same, and the profits earned by the company increased every year. Based on the data concluded above, the authors are interested in conducting research and concluding in the title "The Effect of Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk Period 2009-2018".

### **Formulation of the problem**

Is there a partial effect between the Inventory Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk? Is there a partial effect between the ratio of assets turnover to profitability (ROI) at PT. HM Sampoerna Tbk? Is there a simultaneous influence between Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk?

### **Research purposes**

To determine the effect partially between the Inventory Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk? To determine the effect partially between the Assets Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk? To determine the effect simultaneously between Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI) at PT. HM Sampoerna Tbk?

### **Research purposes**

Definition of inventory turnover ratio. According to R. Agus Sartono n (2010: 443) states that "Inventory in

general is one type of current assets which is quite large in a company."

### **Assets Turnover Ratio**

Definition of asset turnover ratio. According to Kasmir (2012: 185) states that "The ratio of the last asset management measures the turnover of all company assets, and is calculated by dividing sales by total assets and measuring how many sales are obtained from each asset rupiah. If the company does not produce enough business volume to measure investment as much as its total assets, then sales must be increased. "

### **Profitability (ROI)**

Definition of profitability. According to According to Kasmir (2011: 196), which states that "Profitability ratios are ratios to assess a company's ability to seek profits."

### **METHODS**

The population in this study 10 years of financial statements PT. HM Sampoerna Tbk. The sampling technique in this study is saturated sampling, where all members of the population are sampled. Thus the sample in this study is 10 years of financial statements. The type of research used is associative, where the aim is to find out the relationship between variables. In analyzing the data used the instrument test, classical assumption test, regression, coefficient of determination and hypothesis testing.

### **RESULT AND DISCUSSION**

#### **Descriptive Analysis**

In this test used to determine the minimum and maximum scores, mean scores and standard deviations of each variable. The results are as follows:

**Table 1. Results of Descriptive Statistics Analysis**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Inventory Turnover Ratio (X1)	10	2284	23855	14041.6	8463.579
Assets Turnover Ratio (X2)	10	8127	99091	56850.8	36981.070
Return on Investment (Y)	10	1059	12762	7160.9	5203.162
Valid N (listwise)	10				

Inventory Turnover Ratio obtained a minimum value of 2284 and a maximum value of 23855 with an average of 14041.6 with a standard deviation of 8463,579. Turnover Ratio obtained a minimum value of 8127 and a maximum value of 99091 with a mean score of 56850.8 with a standard deviation of 36981,070. Profitability (ROI) obtained a minimum variance of 1059 and a maximum value of 12762 with an average of 7160.9 with a standard deviation of 5203,162.

**Verification Analysis.**

This analysis is intended to determine the effect of independent variables on the dependent variable. The test results are as follows:

**Multiple Linear Regression Analysis**

This regression test is intended to determine changes in the dependent variable if the independent variable changes. The test results are as follows:

**Table 2. Results of Multiple Liner Regression Testing Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	-863.024	706.219			-1.222	.261
Inventory Turnover Ratio (X1)	.116	.159	.189		.728	.490
Assets Turnover Ratio (X2)	.112	.037	.799		3.081	.018

a. Dependent Variable: Return on Investment (Y)

Based on the test results in the above table, the regression equation  $Y = -863.024 + 0.116X1 + 0.112X2$  is obtained. From the equation explained as follows:

- 1) A constant of - 863,024 means that if the Inventory Turnover Ratio and the Asset Turnover Ratio are absent, there is a Profitability (ROI) value of - 863,024 points.
- 2) Regression coefficient of Inventory Turnover Ratio of 0.116, this number is positive, meaning that every time there is an increase in Inventory Turnover

Ratio of 0.116, the Profitability (ROI) will also increase by 0.116 points.

- 3) The regression coefficient of the Asset Turnover Ratio is 0.112, this number is positive, meaning that every time there is an increase in the Asset Turnover Ratio of 0.112, the Profitability (ROI) will also increase by 0.112 points.

**Correlation Coefficient Analysis**

Correlation coefficient analysis is intended to determine the degree of relationship strength of the independent variables on the dependent variable

either partially or simultaneously. The test results are as follows:

**Table 3. Correlation Coefficient Test Results Inventory Turnover Ratio Against Profitability (ROI).**

Correlations <sup>b</sup>		Rasio Perputaran Persediaan (X1)	Return on Investment (Y)
Inventory Turnover Ratio (X1)	Pearson Correlation	1	.958**
	Sig. (2-tailed)		.000
Return on Investment (Y)	Pearson Correlation	.958**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=10

Based on the test results obtained by a correlation value of 0.958 means that

the Inventory Turnover Ratio has a very strong relationship to profitability (ROI).

**Table 4. Test Results for Correlation Coefficient Assets Turnover Ratio to Profitability (ROI).**

Correlations <sup>b</sup>		Assets Turnover Ratio (X2)	Assets Turnover Ratio (X2)
Assets Turnover Ratio (X2)	Pearson Correlation	1	.981**
	Sig. (2-tailed)		.000
Return on Investment (Y)	Pearson Correlation	.981**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=10

Based on the test results obtained a correlation value of 0.981 means that

the Asset Turnover Ratio has a very strong relationship to profitability (ROI).

**Table 5. Results of Correlation Coefficient Testing Simultaneous Inventory Turnover Ratio and Asset Turnover Ratio Against Profitability (ROI).**

Model Summary				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.982 <sup>a</sup>	.965	.955	1101.453

a. Predictors: (Constant), Asset Turnover Ratio (X2), Inventory Turnover Ratio (X1)

Based on the test results obtained a correlation value of 0.982 means that the Inventory Turnover Ratio and the Asset Turnover Ratio simultaneously have a very strong relationship to Profitability (ROI).

### Analysis of the Coefficient of Determination

Analysis of the coefficient of determination is intended to determine the percentage of influence of the independent variable on the dependent variable either partially or simultaneously. The test results are as follows:

**Table 6. Test Results for the Determination Coefficient of the Inventory Turnover Ratio to Profitability (ROI).**

<b>Model Summary</b>				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.958 <sup>a</sup>	.918	.908	1581.595

a. Predictors: (Constant), Inventory Turnover Ratio (X1)

Based on the test results obtained a determination value of 0.918 means that the Inventory Turnover Ratio has

an influence contribution of 91.8% on Profitability (ROI).

**Table 7. Test Results for the Determination Coefficient of the Assets Turnover Ratio to Profitability (ROI).**

<b>Model Summary</b>				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.981 <sup>a</sup>	.963	.958	1068.591

a. Predictors: (Constant), Assets Turnover Ratio (X2)

the test results obtained a determination value of 0.963 means that the Asset Turnover Ratio has an

influence contribution of 96.3% on Profitability (ROI).

**Table 8. Test Results Determination Coefficient of Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI).**

<b>Model Summary</b>				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.982 <sup>a</sup>	.965	.955	1101.453

a. Predictors: (Constant), Asset Turnover Ratio (X2), Inventory Turnover Ratio (X1)

Based on the test results obtained a determination value of 0.965 means that Inventory Turnover Ratio and Asset Turnover Ratio simultaneously have an influence contribution of 96.5% on Profitability (ROI), while the remaining 3.5% is influenced by other factors.

### Hypothesis testing

#### Partial hypothesis test (t test)

Hypothesis testing with t test is used to find out which partial hypotheses are accepted. First Hypothesis: There is a significant effect between the Inventory Turnover Ratio to Profitability (ROI).

**Table 9. Hypothesis Test Results Inventory Turnover Ratio Against Profitability (ROI). Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1109.324	1007.556		-1.101	.303
	Inventory Turnover Ratio (X1)	.589	.062	.958	9.455	.000

a. Dependent Variable: Return on Investment (Y)

Based on the test results in the above table, the value of  $t_{count} > t_{table}$  or  $(9.455 > 2.306)$  is obtained, thus the first hypothesis proposed that there is a significant influence between the Inventory Turnover Ratio to Profitability

(ROI) is accepted. The second hypothesis: There is a significant influence between the ratio of assets turnover to profitability (ROI).

**Table 10. Hypothesis Test Results Ratio of Assets Turnover To Profitability (ROI).**

Coefficients <sup>a</sup>		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t Sig.
1	(Constant)	-686.448	643.454		-1.067 .317
	Assets Turnover Ratio (X2)	.138	.010	.981	14.331 .000

a. Dependent Variable: Return on Investment (Y)

Based on the test results in the table above, the value of  $t_{count} > t_{table}$  or  $(14,331 > 2,306)$  is obtained, thus the second hypothesis proposed that there is a significant influence between the Asset Turnover Ratio to Profitability (ROI) is accepted.

**Simultaneous Hypothesis Test (Test F)**

Hypothesis testing with the F test is used to find out which simultaneous hypotheses are accepted. Third Hypothesis There is a significant influence between Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI).

**Table 11. Hypothesis Test Results Inventory Turnover Ratio and Assets Turnover Ratio to Profitability (ROI).**

ANOVA <sup>a</sup>					
Model		Sum of Squares	df	Mean Square	F Sig.
1	Regression	235163666.692	2	117581833.346	96.919 .000 <sup>b</sup>
	Residual	8492389.745	7	1213198.535	
	Total	243656056.437	9		

a. Dependent Variable: Return on Investment (Y)

b. Predictors: (Constant), Asset Turnover Ratio (X2), Inventory Turnover Ratio (X1)

Based on the test results in the above table, the value of  $F_{count} > F_{table}$  or  $(96,919 > 4,350)$  is obtained, thus the third hypothesis proposed that there is a significant influence between Inventory Turnover Ratio and Asset Turnover Ratio to Profitability (ROI) is accepted.

significant effect on profitability (ROI) with a correlation of 0.958 or has a strong relationship with an influence contribution of 91.8%. Hypothesis testing obtained  $t_{value} > t_{table}$  or  $(9,455 > 2,306)$ . Thus the first hypothesis proposed that there is a significant effect between the Inventory Turnover Ratio to Profitability (ROI) is accepted.

**discussion**  
**Inventory Turnover Ratio To Profitability (ROI)**

Inventory Turnover Ratio has a

**Ratio of Assets to Profitability (ROI)**  
 Asset Turnover Ratio has a

significant effect on profitability (ROI) with a correlation of 0.981 or has a strong relationship with an influence contribution of 96.3%. Hypothesis testing obtained  $t_{count} > t_{table}$  or  $(14,331 > 2,306)$ . Thus the second hypothesis proposed that there is a significant effect between the ratio of assets turnover to profitability (ROI) is accepted.

### **Effect of Inventory Turnover Ratio and Assets Turnover Ratio to Profitability (ROI)**

Inventory Turnover Ratio and Asset Turnover Ratio have a significant effect on profitability (ROI) by obtaining a regression equation  $Y = - 863,024 + 0,116X_1 + 0,112X_2$ , a correlation value of 0,982 or having a strong relationship with an influence contribution of 96.5% while the remaining 3,5% influenced by other factors. Hypothesis testing obtained  $F_{value} > F_{table}$  or  $(96.919 > 4.350)$ . Thus the third hypothesis proposed that there is a significant effect between the Inventory Turnover Ratio and the Assets Turnover Ratio to Profitability (ROI) is accepted.

### **CONCLUSION**

Inventory Turnover Ratio has a significant effect on profitability (ROI) with an influence contribution of 91.8%. Hypothesis testing obtained  $t_{count} > t_{table}$  or  $(9,455 > 2,306)$ . Asset Turnover Ratio has a significant effect on profitability (ROI) with a contribution of 96.3%. Hypothesis testing obtained  $t_{count} > t_{table}$  or  $(14,331 > 2,306)$ . Inventory Turnover Ratio and Asset Turnover Ratio have a significant effect on profitability (ROI) with a contribution of 96.5% while the remaining 3.5% is influenced by other factors. Hypothesis testing obtained by the calculated  $F_{value} > F_{table}$  or  $(96.919 > 4.350)$ .

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