

## NET INCOME DETERMINED OF OPERATING COST ANALYSIS AND INVENTORY TURNOVER

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### ABSTRACT

*This research empirically examines partially the influence of operating cost and inventory turnover to net income and conducted on the food and beverages companies listed in Indonesian stock exchange period 2011-2015. The problems that occur are the decrease of net income despite the operating cost are decrease inventory and turnover are increased,*

*This research uses descriptive analysis verification with the unit of analysis in this research is financial statement of the food and beverages companies listed in Indonesian stock exchange period 2011-2015. And the population is 70 financial statements from 14 companies with sample select by using purposive sampling so obtained samples is 45 financial statements from 9 companies. Data analysis technique used is multiple linear regression analysis and helped by using application program SPSS statistics version 16. These results indicate that net income is influenced by operating cost with negative related, and inventory turnover is influenced with positive related. Partially inventory turnover has more dominant influence than the operating cost.*

**Keywords:** Operating Cost, Inventory Turnover, and Net Income

### I. INTRODUCTION

Rapid development of infrastructure as well as the more easy it entrepreneurs to penetrate the insulation and walls between countries makes the business world increasingly competitive. With respect to such matters, then any company required to be risking its business continuity and do a proper strategy in order to compete with other companies, strategies that can trigger the proper performance management is getting better, because the general public measure the success of the company based on the ability of the company that is visible from the performance management in generating profits in the foreseeable future (Hendra and Diyah, 2011).

Profits or profit including the main purpose of the establishment of any business entity. Without profit, the company acquired do not meet other purposes i.e. the continual growth and social responsibility. To ensure that the company is able to generate a profit, then the company's management should plan and control 2 determinants of earnings that is income and costs (Delfrina Sipangkar Ellys, 2009).

Net income derived from transactions revenue, expense, profit and loss. The income resulting from the difference between the incoming resources (revenue and profits) and resources (cost and losses) during a specific time period (Henry Simamora, 2000:25).

The costs have a large role in affecting the success of the company achieved its goal to earn profit is the operating costs and the cost of the commercial. Operational activity without headers then the rest of the resulting product will not have any benefit for the company (Jane Irene Watania, 2013).

Other factors that can have an effect on net profit is inventory turnover. Inventory turnover ratio is used to measure the number of times the funding that was planted in the

inventory is spinning in one period. The low turnover means shows a lot of capital or working capital are dead or stopped on the inventory items. If we can sell the supplies quickly, then this will improve corporate profits (MichellSuhardi, 2006).

The phenomenon is related to the decreased net income also decreased operational costs quoted from the report of the Financial Review of PT Multi Bintang Indonesia year 2015 according to Maarten Hoedemaker as Finance Director of PT Multi Bintang Indonesia stated, Burden the company's business is declining, a burdens businesses obtain positive influence due to cost-saving policy. However net income also decreased, net income declined flanked because net sales for fiscal year (FY) 2015, primarily due to the impact of the economic situation which is less conducive regulatory ministries and ban the sale of beer at the minimart.

It is not in line with the theory advanced by JopieJusup (2008:35) which States that "If the company can hit operating costs, then companies will be able to increase net income. Likewise, if there is a waste of costs (such as the wearing of excessive Office Tools) will result in a decrease in net income ".

## **II. LITERATURE REVIEW**

According to Margaretha (2011:24) said that operating cost(operating expense) is the overall costs in connection with operational activities beyond the production process included therein are (1) cost of sales and (2) the cost of the Administration and the public.

According to SofyanSyafriHarahap (2011:308) says that the rotation of the inventory shows how fast the inventory turnover in the normal production cycle. The sooner the better because it is considered cycle all its activities of previous runs fast.

According toHarmono (2011:231) said that net income was the company's operating Income after deducting interest expense and taxes.

Theory influence operating cost against net income according to JopieJusuf (2008:35) States that, "If the company can hit operating costs, then companies will be able to increase net income. Likewise, if there is a waste of costs (such as the wearing of excessive Office Tools) will result in a reduction of net income(net profit)".

According to AgusSartono (2008:444) "If inventory is too small then the operating activities of likely delays, or the company's operations at its small capacity. Otherwise, once the inventory is too large then it will result in a low inventory turnover so that companies gain/income decline ".

Based on the framework of thought above, researchers assume a decision while (hypothesis) is as follows:

H<sub>1</sub>: Operating cost effect on net income.

H<sub>2</sub>: Inventory Turnover: effect on net income.

## **III. METHODOLOGY**

### **3.1 Research Methods**

Definitions research methods according to Sugiyono (2014:2) is a way to get scientific data with a specific purpose and usefulness, the scientific method means that research activities are based on scientific traits, namely rational, empirical and systematic way.

The methods used in this research is descriptive method quantitative approach with verifikatif. Using research methods will be known a significant relationship between the variables examined, so that the conclusions will clarify an idea of the object examined.

According to Sugiyono (2014:80) is an area of research populations sense a generalization which consisted of objects/subjects that have certain qualities and characteristics set by the researchers to learn and then drawn the conclusion.

Researchers used population is the annual financial report of the food and beverage companies were listed on the Indonesia stock exchange (idx) 2011 year period up to the year 2015 that is as much as 70 financial reports from 14 companies.

According to Sugiyono (2014:68) says purposive sampling Technique, namely the determination of the sample with a particular consideration. The sample used in this study were 45 financial statements of 9 food and beverage companies for 5 years which has entered into the criteria of characteristics have been determined.

To obtain data and information related to issues that are examined, then the author of research on representative office in Bandung BEI JL. PH.H. MustofaNo. 33 Bandung phone: (022) 20524208 Fax: (022) 20524208 Email: pipm.bandung@idx-pipm.net. And the data obtained also through the website Indonesia stock exchange (idx) IE [www.idx.co.id](http://www.idx.co.id).

The technique of data collection is the most conveniently located steps in research, for the main goal in the study was obtained data, without knowing the techniques of data collection, then researchers will not get the data that meet the standards set Sugiyono (2014:224). As for engineering pengumpulan data used by using field research (observation and documentation) as well as Research Libraries.

### **3.2 Testing Methods Of Data**

#### **3.2.1 A Classic Assumption Test**

To obtain a more accurate result in the multiple regression analysis is then performed a classic assumption test so that the results obtained regression equation is which has the nature of the Best Linear Unbiased Estimator (BLUE). Some classical regression assumptions that must be met first before using multiple regression analysis (Multiple Linear Regression) as a tool to analyse the influence of the variables examined. There are four types of tests on this classic assumption test, including

:

##### **a) Normality Test**

According to Ghozali (2005:110) States that this normality test aimed at testing whether in regression models, residual or bully variables have normal distributions. This test must be met given the F test and t-test assumes that the residual value follows the normal distribution. Test of normality can be using the Kolmogorov-Smirnov Test. residual Data is said to be normal if the value of distributed sig> 0.05.

##### **b) Multicollinearity Test**

According to Ghozali (2005:91) says the test is aimed to test whether the multicollinearity in regression models uncovered the existence of a correlation between free variables (the independent). Good regression models should not happen the correlation between independent variables.

Way that is used to detect whether or not there is multikoliniearitas by using the Variance Inflation Factors(VIF). If the VIF is not more than 10 and no less than the tolerance value 0.1 then the regression model can be said to be independent of multicollinearity (Gujarati, 2003:362).

##### **c) HeteroskedastisitasTest**

Heteroskedastisitas test aimed at testing whether the regression occurred in the model of inequality of variance and residual one observation to other observations, if the residual variance and one other observation to observation of remains, it is called homoskedastisitas and if different called heteroskedastisitas. Good regression model is the homoskedastisitas or heteroskedastisitas does not occur. Test heteroskedastisitas test is carried out using Glejser, performed with the meregresikan residual absolute value obtained from regression models as the dependent variable for all independent variable in regression models. If the value of the regression coefficient of each variable in the

regression model is not statistically significant, then you can conclude is not going heteroskedastisitas.

#### d) Autocorrelation Test

Autocorrelation test aimed at testing whether in linear regression models there is a correlation between the error of a bully in the period  $t$  of a bully with an error in the period  $t-1$  (earlier). In addition, the autocorrelation test used to find out or no deviation classic assumption autocorrelation i.e. correlation between residual on one observation with other observations in regression models for good regression equation is that do not have the problem of autocorrelation, in case of the equation then becomes the autocorrelation is not good or not worth used prediction (DanangSunnyoto, 2013:97). According to Danangsunnyoto (2013:98), one of the measure in determining whether or not there is a problem with autocorrelation test Durbin-Watson (DW) with the following conditions:

a) positive autocorrelation) occurs, if the value is below -2 DW (DW < -2).

b) autocorrelation is not the case, if the value of the DW between -2 and + 2 or -2 < DW + 2.

c) negative autocorrelation Occurred, if the value is above + 2 DW or DW > + 2.

### 3.2.2 Multiple Linear regression Analysis

The use of regression analysis, is to decide whether the rising and declining of independent variable operational costs and Inventory Turnover can be done through raising and lowering the dependent variable (net profit), a linear regression analysis compounds used in the study because there are two independent variables i.e. operating cost ( $X_1$ ) and inventory turnover ( $X_2$ ) that affect the dependent variable is one that is net income ( $Y$ ).

### 3.2.3 Partial Correlation Analysis

Analysis of correlation of aims to measure the strength of an Association (relationship) between two variables is linear. The correlation also shows no functional relationship.

Analysis of the correlation is the analysis that is used to find out the direction and strength of relationships between variables. The directions stated in the positive and negative, while the strong or weak relationships expressed in magnitude of the correlation coefficient. The value of the correlation coefficient can be expressed  $-1 \leq R \leq 1$  if:

1. If (-) means that there is a negative relationship.

2. If the (+) means that there is a positive relationship.

### 3.2.4 Coefficient Determination Analysis

The magnitude of the influence of the operating cost ( $X_1$ ) and inventory turnover ( $X_2$ ) against net income ( $Y$ ) can be known by using the analysis of the coefficient of determination or abbreviated Kd obtained by squaring the coefficient correlation, namely:

$$Kd = r^2 \times 100\%$$

Sumber: Umi Narimawati (2010:50)

Description:

Kd = Coefficient Of Determination.

$r^2$  = Coefficient Of Correlation.

### 3.2.5 Hypothesis testing

According to Sugiyono (2014:159) says that the hypothesis is a temporary answer against the outline of the research issues, where the outline of the research problem has been stated in the question.

*Partial testing using the test t (partially significance test). The steps taken in testing are:*

1. *Compose Hypothesis*
  - a) *The influence of Operating Cost against Net Income*  
 $H_0: \beta_1 \geq 0$  *there are no Operating Cost against the influence of variables tied to Net Income.*  
 $H_a: \beta_1 < 0$  *there is influence Operating Costs against variables bound Net Income.*
  - b) *The influence of Inventory Turnover against Net Income*  
 $H_0: \beta_2 = 0$  *there is no influence of Inventory Turnover against variables bound to Net Income.*  
 $H_a: > 0 \beta_2$  *there is Inventory Turnover against the influence of variables tied to Net Income.*
2. *Specify the level of significance that is amounting to 0.05 ( $\alpha = 0.05$ ), with degrees of freedom ( $df = n-k-1$ ).*
3. *Looking for value  $t_{hitung}$  with the application of spss.*
4. *Determine the area of acceptance or rejection of hypotheses by comparing the  $t_{hitung}$  with the  $t_{tabel}$  with the provisions of:*
  - *If  $t_{hitung} < -t_{tabel}$  or  $t_{hitung} > t_{tabel}$  the dependent variable, partially affected by the independent variable, then  $H_0$  rejected (significant).*
  - *If  $-t_{tabel} \leq t_{hitung} \leq t_{tabel}$  the dependent variables are partial, not affected by the independent variable, then  $H_0$  accepted (not significant).*
5. *Determine probability conclusions based on IE d ith the use value of probability,  $H_0$  will be accepted if the probability was less than 0.05.*

#### IV THE RESULTS OF RESEARCH AND DISCUSSION

##### 4.1 The Influence Of Operating Cost Against Net Income

*The results of hypothesis testing that is rejected  $H_0$  that means that operating cost effect on net income. The influence of operating cost against net income of 27.2% and difference 72.8% are affected by other variables not examined in this study such as production expenses, capital, debt, income and others. The test results are entered in the correlation interval and is negative, this means that if operating costs increased then the net income earned the company will decline. This research fits with the theory according to JopieJusuf (2008.35) i.e. when the company can hit operating costs, then companies will be able to increase net income. Likewise, if there is a waste of costs (such as the wearing of excessive Office Tools) will result in a reduction of net income (net profit).*

*So the magnitude of the operating cost affect net income. This research has addressed the phenomenon that had been featured previously in the company of PT Multi Bintang Indonesia Tbk (MLBI) who experienced a decrease in net income in the year 2014 and 2015 respectively. But the cost, in the year 2014 and 2015 the company had successfully pressed the operating costs but decrease operational costs of PT Multi Bintang Indonesia Tbk (MLBI) is not followed by an increase in net income. A State, because companies have difficulty in selling their products is mainly a result of the economic situation which is less conducive and regulations Department banned the sale of beer at the minimart. With this result shows that the existence of other factors affecting the net income that is not examined in this peneletian as well as greater sales affects net income.*

*This research is supported by the research according to I WayanBayuWisesa, dkk (2014) States that "operational costs had a negative effect against the net income. This means that the greater the operational costs that are incurred then the smaller the net income gained and smaller operating costs are used then the greater the net income gained".*

#### **4.2 The Influence Of Operating Cost Against Inventory Turnover**

The results of hypothesis testing that is rejected  $H_0$  means that inventory turnover effect on net income. The influence of inventory turnover against a net income of 50.5% and difference 49.5% are affected by other variables not examined in this study such as sales, accounts receivable turnover, working capital turnover, interest expense, tax burden and others. The test results correlation go in strong and positive nature of interval, meaning if the inventory turnover has increased then the net income earned the company will experience increased as well. This research fits with the theory according to AgusSartono (2008:444), i.e. when inventory is too small then the operating activities of likely delays, or the company's operations at its small capacity. Otherwise, once the inventory is too large then it will result in a low inventory turnover so that companies gain/income decline.

So the magnitude of the inventory turnover affects net income. This research has addressed the phenomenon has put forth earlier net profit on company PT Indofood Successful Prosperous Tbk (INDF) in 2013 and 2015 which experienced a decrease in net profit. While turnover stock company achieved for 2 (two) year experience increased. An increase in inventory turnover reached the company does not make the company's net income increase, otherwise the company achieved net profits are likely to decline. The decrease in net income was caused because of the magnitude of foreign exchange losses incurred by the company due to the weakening of the exchange rate of the rupiah the previous year. With these results show that other factors more influence net income compared to the rotation of supplies, other factors such as foreign exchange, sales, accounts receivable turnover, working capital turnover, interest expense, tax burden, and others.

This research is supported by the research according to Muh.NajibKasim&Riska (2014) researching on analysis of Inventory Turnover in increasing Profit on Mutual Kopkar PT. PLN (Persero) Area in action. The results of his research stating that "With the calculation of inventory turnover against the profit is known, the greater the inventory turnover inventory turnover then against profit-increasing", the increase in the company's profit will be result in an increase in net income because net income gained after the company's income was reduced by tax burden incurred by the company.

#### **V. CONCLUSIONS**

Based on the results of data analysis and discussion that has been conducted in the previous chapter, then the researchers took some conclusions as follows:

1. Operating cost effect on net income at the company's manufacturing Sub sector of the food and beverages were listed on the Indonesia stock exchange, where each 2011-2015 period there was a decrease in operating costs it will increase net income.
2. Inventory Turnover effect on net profit at the Company's manufacturing Sub sector of the food and beverages were listed on the Indonesia stock exchange, where each 2011-2015 period there was an increase in inventory turnover it will increase net profit.

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