

## **The Relationship Between Different Levels of Income To Stock Price of Manufacturing Companies in Indonesia**

**Benny Lule\***

*Fakultas Ekonomi Universitas Klabat*

**This Study is to Analyze the Relationship between different levels of income with stock price for five segments of manufacturing companies. The study divides different level of income into three parts namely, Gross Profit, Earnings Before Interest and Tax, and Net Income, Spearman rank correlation was used to test the relationship between different levels of income with stock price. The findings indicate that Gross Profit is related to Stock Price but not for EBIT and Net Income.**

Key words: Different level of income, Gross Profit, EBIT, Net Income, stock price.

### **INTRODUCTION**

**Background of the study.** The Indonesian Capital Market has experience growth as seen from the growth in the number of firm that “ go public” in Indonesian Stock exchange and the volume of stock being traded in Indonesia in recent years. Adika(2008) stated that stock price is one of the measurements of performance index for a go public firm. Today the theories and models of stock price assessment have changed from simple to complex. The capital market investors, observers, and academicians have studied factors that can influence stock price. Some studies showed that there are significant positive relationship between profit and stock price (Ball & Brown, 1968; Beavert, Clarke, & Wright, 1979; Beavert, Lambert, & Morse, 1980; Litzenberg & Rao, 1971 in Foster, 1986; Lipe, 1986). In Addition, those studies showed that in certain periods, there were relationship between the profit size or amount and the changes of stock price.

The fluctuation of a firm's stock price depends on the firm condition as well as market demand of stock. Stock price movement provides capital gain for investors need information concerning the factors that would have an impact on the stock price

both directly and indirectly. Information can be obtained from internal as well as eksternal parties. From external parties it includes the economic conditions, governmental policies, and interest rate. The movement of stock prices cannot be separated from accounting information, specifically, the financial statement. This statement shows the ending result of an accounting, process which is prepared to help investor in investment decision making. Data contained in the financial statements are usefull information, for investors in making decision whether to buy, hold or to sell their stocks, because gaining profit is one of the goals of stock market trading stock market.

One of financial statement is income statement. Income statement enables investors to assess thr prospect of cash inflow and outflow because income statement contains profit information that can estimate the firm ability to generate cash. Investors will evaluate the firm's cash flow or the firm's activities in the past, present , and in the future in order to set a new price level of the stocks. Nairbohu (1991) argues that stock price of a firm reflects the ability of a firm to generate income. Thus, information found in the income statement can be used by investors

\*corresponding author:  
benlu@unklab.ac.id

to assess and forecast the firm's performance, also to predict the firm's stock price in the future. One of the important information in financial statement which is also component of income statement its profit which includes gross profit earnings before interest and tax (EBIT), and net income. These are the main parameters to measure the firm's performance both in the investors and the managements view point.

**Objectives of the study.** The aim of this study is to determine the relationship between different level of income namely: Gross profit, earnings before interest and tax (EBIT), and net income with stock price. This aim can be broken down in to three (3) research questions as follow: a). Does gross profit relate to stock price? b). Does EBIT relate to stock price? c). Does net income relate to stock price?

## RESEARCH METHODOLOGY

This Study is designed using descriptive method which describes the characteristic of variable in the phenomena of interest to the research from individual organization industry or other perspectives (Sakaran, 1992). **Population and sample data.** The sampling technique use in this study is purposive sampling method which according to Hariwijaya and Triton (2007) in Mokodompit (2008), a sampling technique that is based on certain characteristics that are relate to the characteristic of the population known previously. The criteria of firm's that are taken as a sample in this study are manufacturing companies listed in an are acessible through IDX website which reporting complete financial statement from year 2005 – 2008. After a careful study done by reserarcher, the total manufacturing companies that meet the criteria to become sample in this study are: 14 food and beverages companies, 9 Apparel and other textile products companies, 15 automotive and Allied product companies, 12 Whole sale and Retail Trade companies, which makes a total sample of 50 companies.

Data used in this study is secondary data, namely: soft copy of financial statement published by Indonesia stock exchange website ([www.idx.co.id](http://www.idx.co.id)). From financial statement, this study used income statement in order to get data about gross profit, earnings before interest and tax (EBIT), and net profit in addition, this study also used some statistic report in order to get information about stock price during period 2004 – 2007. Therefore, this study does not used any qustionnaires or interviews.

**Statistic Formula** the aim of this study is to analyze the relationship between different levels of income and stock price. In this case, gross profit, EBIT and net income are the component taken from income statement. Normality test had been conducted to test whether data used normal or non normal and result had shown that the data being used in this study is no normal. Therefore, this study used Spearment Rank Correlation which is a non- parametric statistic method. The equation used to test the Spearment Rank Correlation is as follow:

$$r_s = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n(n^2-1)} \quad (1)$$

Where :

- d is the difference between the ranks for each pair
- n is the number of pair observations

## RESULT AND DISCUSSION

This section will present and discuss the result of the study .the presentation will be based on the research question. **Research Question 1:** Does gross profit relate to stock price? The statistical result for this research question by using spearment correlation ask been shown in table 1 indicates that significant value of gross profit is equal to zero which is less than 0.05 meaning there is a significant correlation between gross profit and stock price. It can be concluded that gross profit is

related to stock price. Therefore, information contained in Gross profit is relevant information for investor in decision making. Meaning, information contained in gross profit can be used by investor and making decision as well as predicting the firm's stock price in the future.

Table 1. Statistical Result for the relationship between Gross Profit and Stock Price of the Manufacturing Firm's year 2005 – 2008.

Spearman Rho	Gross Profit	Stock Price
Correlation	1.000	.370**
significant	-	.000
Sig. (2 tailed)	150	150
N		

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

This finding is consistent with previous research conducted, such as, Pradhono and Christiawan (2004) Who investigated the measurement which have most significance or influence on the stock holder in making decision. The findings using data of manufacturing companies in consumption sector over period 2000 – 2003 indicated that profit has significant influence on stock price as well as the profit has ability to describe the stock price movement. Another study was conducted by Mital & Vyas (2009) indicate that income is an important factor influencing that decision made by investor in which the finding of their research indicates a significant value of 0.048 which is less than 0.05. For manufacturing companies, investor with high Gross Profit tend to influence investor more for decision making compare to other level of income. Wild, Subramanyam, and Hosley (2009) argued that, income (which include gross profit) Is the most demanded piece of companies information in the financial market which provides both measure of the change in shareholders wealth ( change in value) for a period and an estimate of the company future earning power.

**Research Question 2: Does Earnings before interest and Tax (EBIT) relate to stock Price?** Statistical result as shown in table 2 indicates that significant value of EBIT is at 0.350 which is greater than 0.05 meaning there is no significant correlation between EBIT Stock Price. Therefore information contained in EBIT is not relevant information for investor making decision. Meaning, information contained in EBIT contain less information in helping investors in making decision as well as to predict the firm's stock price in the future.

Table 2. Statistical Result for the relationship between EBIT and Stock Price of the Manufacturing Firm's year 2005 – 2008.

Spearman Rho	Gross Profit	Stock Price
Correlation	1.000	.370**
significant	-	.000
Sig. (2 tailed)	150	150
N		

Several explanation why information contains in EBIT has less information content for helping Investor in making decision as well as predicting, the firm stock price in the future is that, there are less association between the changes in EBIT. Just like Wolk, Dodd, Terney (2004) argued the usefulness of accounting information to investor has been empirically investigated through the association of publicly released accounting data with changes in the firm's stock prices. When there is a significant association, then there is evidence that accounting information is useful. Therefore it could be concluded that the information content in EBIT is less useful in helping for decision making.

**Research Question 3: Does Net Income (NI) relate to Stock Price?** Statistical Result as shown in table 3 indicate that significant value of NI is 0.217 which is greater than 0.05 means there is no significant correlation between NI and Stock price. therefore, Information contained

in Net Income is not relevant Information for Investor in making decision. Meaning, information contains in Net Income has less information contain in helping Investor in making decision as well as to predicting the firm's stock price in the future.

Table 3. Statistical Result for the relationship between Net Income and Stock Price of the Manufacturing Firm's year 2005 – 2008.

Spearman Rho	Gross Profit	Stock Price
Correlation	1.000	.370**
significant	-	.000
Sig. (2 tailed)	150	150
N		

Some Studies have indicated that indicated that diiferent levels of income is a major factor affecting investment decisions. Hira (1987) examined the different level of income by Gross Profit, EBIT as well as Net Income, and chi-square test indicated that Gross Profit was a major factor, followed by EBIT and Net Income. Gutter at al. (1999) and Haliassons and Bertaut (1995) concluded that different levels of income are significantly and positively related to changing of stock price.

This finding is consistent with theory of Thomas (1990) who argued stock price of a firm less likely to reflect the ability of firm to income. Other finding is also revealed in Brazil (Bromwich & Walker, 1998) that tested the relationship between different levels of income (Net income and profit before interest and taxes, gain and loss) with stock price. The hypothesis is tested through linear regression and samples being, used are companies traded in main Brazilian stock exchange. His result shows that thereare no relationship between variable profit before interest, tax as well as other gain and losses, and less relationshipis found between variable Net income and stock price. Additionally, Ball et al. (2000) argued that cash flows are more informative than earnings because of the management discretion inherent in accruals.

## CONCLUSIONS

For the first research question, “Does Gross Profit relate to stock Price?” Finding suggest that Gross Profit is relevant Information for investor in making decision. For the second one, “ Does Earnings before Interest and Tax (EBIT) relate to Stock Price?” Finding suggests that EBIT does not relate to Stock Price therefore it could be concluded that Information contains in EBIT is not relevant Information for investor in making decision. For the last one, “ Does Net Profit Relate to Stock Price?” Finding suggest that Net Income does not related to Stock Price therefore could be concluded that information contains in Net Income is not relevant Information for investor in making decision.

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