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**STOCK PRICE ANALYSIS BEFORE AND AFTER THE ISSUANCE  
OF FINANCIAL STATEMENTS: SURVEY ON BASIC AND CHEMICAL INDUSTRIES  
AT INDONESIA STOCK EXCHANGE**

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**ABSTRACT**

This paper presents stock price analysis before and after the issuance of financial statements of basic and chemical industries listed in Indonesia Stock Exchange in 2016. The variables investigated in this research were both average stock prices for five days before and after the issuance of financial statements in 2016. Based on the data processing results using SPSS version 16, there was no difference indicated in the stock prices before and after the issuance of financial statements in 2016. This indicates that the issuance of financial statements has no impact on stock prices of basic and chemical industries listed in Indonesia Stock Exchange. That is, in investing, investors tend not to use financial statements as the basis for investment decision-making. In other words, it is possible that investors are not oriented to make a long-term investment but merely intend to utilize their idle funds. Thus, in this research, conducting technical analysis was considered enough to answer the research question so that there was no need to further carry out fundamental analysis.

**KEY WORDS**

Stock, price, financial statement, industry, funds.

As stipulated in Law Number 8 of 1995 on capital market, it is defined as any activities related to the public offering and trading of securities it produces as well as securities-related institutions and professions. The capital market in general is a meeting place of the sellers in the capital market which is companies which require capital and called the issuer.

The role of the stock exchange for investors includes (a) promoting investment in accordance with economic growth; (b) obtaining dividends for those who own or hold shares, (c) providing an alternative investment in the form of relevant instruments that may reduce the risks.

In addition the role of the stock exchange for the issuers includes (a) obtaining a large enough amount of funding and investment that can be used to increase production capacity, (b) improving the image or value of the companies through the high solvency of the companies that have the ability to meet all their obligations, (c) reducing the dependence of issuers to banks.

The description of an entity is reflected by the issuance of financial statements, namely Balance Sheet and Profit and Loss. The balance sheet describes the condition or position of a company at a given period, while profit and loss shows the performance achieved by the company in a certain period. As related to the two reports, it indicates that the asset as the resource owned by the company and in operation ultimately it results in benefits in the form of profit.

The results achieved by the company will affect the value of the company and will affect the stock price. There are two approaches that are commonly used to analyze stock prices, namely fundamental and technical analyses. Fundamental analysis is basically trying to estimate stock prices in the future by (1) estimating the value of the fundamental factors that influence the future stock price, (2) applying the relationship of macroeconomic variables, industry analysis and company analysis; this model is known as share price forecasting model.

Technical analysis is an attempt to estimate stock prices by observing changes in stock prices of a company. Technical analysis may determine the best moment when to buy or sell shares by utilizing technical indicators or using graphical analysis. Based on the above background, the researcher derived the study with the focus on stock price analysis before and after the issuance of financial statements of basic and chemical industries listed at the Indonesia Stock Exchange (IDX).

Based on the indication of the problems, the formulation of the problem is on how the impact of the issuance of financial statements on stock prices particularly on companies of basic and chemical industry. Thus, the purpose of this study is to determine the impacts of the issuance of financial statements on stock prices on stock prices particularly on companies of basic and chemical industry listed at IDX.

## **LITERATURE REVIEW**

The financial statements describe the financial condition and performance as well as the cash flows of an entity or a company. The financial statements will become a key concern for investors to assess the entity or company of (Ross, Randolph, & Jeffrey, 2005).

The Indonesian Institute of Accountants (2015) describes the financial statement as a structure that presents the financial position and financial performance of an entity. The general purpose of the financial statements in relation with the public interest is to provide any relevant information on financial position, financial performance, and cash flow of entities, which is very essential for making economic decisions for its users.

Investors are very concerned with the financial statements, particularly to assess the condition and performance of the entity. By looking at the financial statements, the investors are able to assess to what extent the companies' success in their business activities; therefore, they may predict the potential growth of the companies in the future. In addition, the investors may predict the amount they may gain from the investment to the companies. Thus, the investors may take the decision whether to make investments through securities traded at the Indonesia Stock Exchange (IDX).

The analytical approaches employed to assess companies in terms of their financial statements are through fundamental and technical analyses. Fundamental analysis is a method of evaluating a security in attempt to measure its intrinsic value, by examining related economic, financial and other qualitative and quantitative factors. Fundamental analysts study anything that may affect the security's value, including macroeconomic factors such as the overall economy and industry conditions, and microeconomic factors such as financial conditions and management of the company. The main goal of fundamental analysis is to produce the quantitative value of which an investor can compare with the security's current price, thus indicating whether the security is undervalued or overvalued.

The intrinsic value is the actual value of a company or an asset based on an underlying perception of its true value including all aspects of the business, in terms of both tangible and intangible factors. This value may or may not be the same as the current market value. Additionally, the intrinsic value is primarily used in options pricing to indicate the amount an option is in the money.

Wira (2016) mentioned that there are six fundamental elements in conducting fundamental analysis, namely: EPS (Earning per Share); PER (Price Earnings Ratio); PBV (Price to Book Value); ROE (Return on Equity); DER (Debt to Equity Ratio); DY (Dividend Yield).

Technical analysis is a stock price analysis technique which is most widely used by investors as shown in the research by Taylor and Aller (1992) in Fernandez-Rodriguez, et al (1999) asserting that most investors (more than 90%) gave higher weight on the use of technical analysis than with fundamental analysis. However, even though the technical analysis is mostly used by investors, various researches in Indonesia capital market tend to conduct fundamental studies on the capital market.

Wira (2016) defined the technical analysis as an analytical technique usually employed by traders to assist buying and selling decisions in stock trading, forex, gold or commodities. There are two functions in doing this technical analysis are:

*Identifying current trends and pattern.* Technical analysis is used to analyze prices based on price data in the past. Based on these data, analysts try to see particular trend or price patterns that occurred; traders usually follow the existing patterns. For example, when prices tend to rise, traders open a buy position. On the other hand, when prices tend to fall, traders open a sell position. In determining the current trend or pattern, users either use tools or indicators.

*Assisting to determine buying and selling decisions.* Technical analysis may help the traders to determine the sale or buy decision. Usually traders use the following indicators as the considerations: Moving Average, MACD (Moving Average Convergence Divergence); RSI (Relative Strength Index); Stochastic, Parabolic SAR; Bollinger Band.

Various studies have shown different research results on what the best methods can be used on the technical analysis.

## METHODS OF RESEARCH

This is a comparative by nature which is intended to observe the difference of stock prices before and after the issuance of the financial statements of companies on basic and chemical listed at the Indonesia Stock Exchange (IDX) in 2015.

The population in this study was companies running their business on basic and chemical industries amounting to 55 companies were chosen as the samples by considering the following categories: the availability of data related to financial statements in 2015, and the issuers made profit in 2015.

Based on the research framework, the operational variables were the average prices of the stocks within five days before and after the issuance of the financial statements.

In order to test the research hypothesis, statistical hypothesis testing was conducted as follows:

*Normality Testing using Lilliefors Test.* Normality testing using Lilliefors test aims to test the normality of data which are not compiled in the frequency distribution list and the least amount of data ( $4 \leq n < 30$ ) with the following rule of decision:

- $H_0$  is accepted if  $L_o \leq L_{critical}$ ;
- $H_0$  is rejected if  $L_o > L_{critical}$ .

*Homogeneity Testing using  $F_{maximum}$ .* Homogeneity Test of variance with  $F_{maximum}$  was intended to observe whether the two variances were homogeneous or not with the following formulation:

- $H_0$  - the two variances are homogenous;
- $H_a$  - the two variances are not homogenous.

$$F = \frac{\text{maximum variance}}{\text{minimum variance}}$$

Rule of decision:

- $H_0$  is accepted if  $F_{statistic} \leq F_{table}$ ;
- $H_0$  is rejected if  $F_{statistic} > F_{table}$ .

*Hypothesis testing using t Test:*

$H_0$ : There is no difference in stock prices before and after the issuance of financial statements of companies on basic and chemical industries listed in IDX;

$H_a$ : There are differences in stock prices before and after the issuance of financial statements of companies on basic and chemical industries listed in IDX.

Statistical hypothesis:

- $H_0: \mu_A = \mu_B$ ;
- $H_a: \mu_A \neq \mu_B$ .

Calculating the t score with the following formula (Sugiyono, 2013:122):

$$t \text{ statistic} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2} - 2r\left(\frac{s_1}{\sqrt{n_1}}\right)\left(\frac{s_2}{\sqrt{n_2}}\right)}}$$

Ho is accepted and Ha is rejected:  $-t_{\frac{1}{2}\alpha} \leq t \text{ statistic} \leq t_{\frac{1}{2}\alpha}$ .

Ho is rejected and Ha is accepted:  $-t \text{ statistic} \leq -t_{\frac{1}{2}\alpha}$  or  $t \text{ statistic} \geq t_{\frac{1}{2}\alpha}$ .

## RESULTS OF STUDY

Based on the results of processing to 28 companies from 55 companies, 22 companies did not meet the requirements determined in this research. The results of its processing can be described in Table 1.

Table 1 – Result of Statistical Analysis

n/n	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 before - after	2.09079	24.30806	4.59379	-7.33490	11.51647	.455	27	.653

Based on Table 1, in relation with the issuance of financial statements issued by issuers, investors were not influenced significantly (with the score of 0.653 higher than 0.05), or  $t_{\text{count}}$  0.455 is smaller than  $t_{\text{table}}$  0.684 meaning that Ho is accepted and Ha is rejected. This indicates that there is no difference in stock prices before and after the issuance of financial statements by the companies listed in IDX. Investors, however, tend not to be influenced by any financial statements issued by the issuers; it might be possible for the investors to use only technical analysis as a basis for decision-making process for their investment.

In line with previous research conducted by Taylor and Aller (1992) in Fernandez-Rodriguez et al. (1999) found that most investors (more than 90%) gave higher weight to the use of technical analysis than fundamental analysis. Even though technical analysis is mostly used by investors, however, various researches in relation with capital market in Indonesia tend to employ fundamental study on capital market.

This is similar to the results of the research carried out by Bouteska and Rega (2017) that accounting information is not reflected in stock prices, meaning that stock prices do not reflect on information received by investors, but stock prices reflect investors' behavior in investment. However, the finding is not similar with the results of the research conducted by Glezakos, Mylonakis, & Kafouros (2012) that the fundamental analysis apparently becomes the basis for investors for their investment.

## CONCLUSION

Based on the results and discussion, the stock prices in the secondary market in basic and chemical industries listed in the Indonesia Stock Exchange is not influenced by the issuance of the financial statements of the companies; it is possible that the investors in investing their capital rely on the technical analysis approach instead, despite the fact the financial statements indirectly may describe the condition of the company (issuers) that actually is imminent.

## REFERENCES

1. Bouteska, A & Rega, B. 2017. Earnings announcement effect on the Tunisian stock market. Bouteska & Regaieg, Cogent Business & Management, 4: 1413733. <https://doi.org/10.1080/23311975.2017.1413733>
2. Foster, G. 1986. Financial Statement Analysis. NJ: Prentice Hall.

3. Hosmer, D.W., Lemeshow, S., & Sturdivant, R.X. 2013. Applied Logistic Regression. New Jersey: John Wiley & Sons, Inc.
4. Ghozali, I. (2011). Application of Multivariate Analysis with SPSS, Third edition. Semarang: Diponegoro University Publishing Agency.
5. Glezakos, M., Mylonakis, J., Kafouros, C. 2012. The Impact of Accounting Information on Stock Prices: Evidence from the Athens Stock Exchange. International Journal of Economics and Finance, Vol. 4, No. 2.
6. Neergaard, L.K. 2009. Drivers of Successful Cross Border Mergers and Acquisitions a Meta Analysis of The Literature. Aarhus: Department of Management Aarhus School of Business.
7. Sugiyono. 2013. Statistic For Research. Bandung: Alfabeta.
8. Wira, D. 2016. Technical Analysis for Maximum Profit (Second Edition). Jakarta: Exceed, ISBN: 978-602-18887-7-3.