OVERVIEW OF RETURN ON INVESTMENT ON CIGARETTE COMPANIES REGISTERED IN INDONESIA STOCK EXCHANGE

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Abstract—This study aims to confirm the impact of investment returns in the form of profitability (ROA, ROE and EPS) on stock prices. The study conducted on cigarette manufacturing companies listed in the Indonesia Stock Exchange for 2012 - 2018 period. The data collection method was doing through secondary data obtained through the Indonesia Stock Exchange website. To test the hypothesis through linear regression analysis through IBM SPSS Version 25 software. It found that ROA, ROE and EPS simultaneously had a positive and significant effect on stock prices. Besides, partially it was found that ROA did not affect stock prices, whereas ROE and EPS had a positive and significant effect on stock prices, and EPS was the dominant influence. This paper also contains discussions relating to theoretical and empirical studies and new findings in research.

Index Terms— ROA, ROE, EPS, Stock Price, Cigarette Company, Investment.

1. INTRODUCTION

Cigarette company shares are indeed profitable enough to be collected. Because it is still unclear that the enactment of the increase in cigarette excise makes the price of the shares of this company still have good prospects. Not to mention, the number of smokers in Indonesia is indeed very much. This business is indeed quite controversial. Because, the more people who are not healthy, the more profitable the cigarette company. The price of cigarettes in Indonesia is indeed too low, and that finally triggered the number of new smokers to emerge and increased from 7.2 per cent in 2013 to 8.8 per cent in 2016. The most critical condition is that 84.8 million smokers in Indonesia are middle to lower class people who earn less than Rp. 20 thousand per day. Until now, it is just waiting for the times of rising cigarette prices caused by rising cigarette customs up to 23%. The smoking ban that has imposed throughout Indonesia has been enacted in recent years so that the issue of increasing cigarette customs tariffs will further weaken the cigarette producers. This phenomenon can clearly illustrate at the share prices of cigarette companies listed on the Indonesia Stock Exchange, which are also affected by the decline. GGRM, HMSP and WIIM stocks during 2012 - 2018 experienced a significant decline in hard work in recent years. However, this situation also caused the company's internal factors to influence the determination of stock prices in the market. In this study, the focus is on the rate of return on investment and also earnings per share.

ROE partially has a significant effect on stock prices. There is because ROE is an essential ratio, and if the value is excellent and continues to be stable, it will make the stock price high. ROE shows the return on equity. When an investor invests, he indeed expects a return on what he has invested.

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This ratio illustrates how well the company can return what investors have invested. Therefore, the higher ROE will attract more investors and cause an increase in stock prices (Brigham and Houston, 2013). In the range of 2012 to 2018, it saw that the stock prices of cigarette manufacturing companies on the Indonesia Stock Exchange experienced a significant decline. These, of course, is also caused by the declining profitability of the company. Realization of company sales also declined due to government policies on smoking bans.

2. LITERATURE REVIEW

2.1 Investation Theory

Investment theory can also regard as a science which is said to be the science of investment. Science is a collection of several theories that can solve various problems in science. Investment is often also called investment or capital formation. Investment can be interpreted as spending by investors or companies to purchase capital goods or production equipment to increase the ability to produce goods and services available in the economy. So an expenditure can be regarded as an investment if it intended to increase production capability. Investment is essential in the economy (Scott and Eugene, 2000). This investment theory know before the 20th century, but Williams (1930) introduced this investment theory, then the beginning of this investment theory was introduced by Markowitz (1952) by proposing a very well-known theory namely portfolio theory, namely “The process of selecting a portfolio may be divided into two stages. The first stage starts with observation and experience and ends with beliefs about the future performances of available securities. The second stage starts with the relevant beliefs about future performances and ends with the choice of the portfolio”(Markowitz, 2010). The definition of investment stated, "Investment is the sacrifice of the certain present value of (possibly uncertain) future value" (Sharpe and William, 2007). Stated that "investment is the current commitment of dollars for a while in order to derive future payments that will compensate the investor for (1) the time the funds committed, (2) the expected rate of inflation, and (3) the uncertainty of the future payments" (Gitman and Joenhnk, 2008). Investment is the current commitment measured in dollars in a period to

obtain future payments that will compensate investors for the time of the funds committed, the expected level of inflation and the uncertainty of future payments (Reilly, Frank K & Brown *et al.*, 2012), (Gitman and Michael, 2004).

2.2 Financial Ratio Analysis

Financial statements issued by a company, whether in the form of financial position reports, statements of comprehensive income, statements of changes in equity, and statements of cash flows are enough to present a lot of fundamental data of the company concerned to investors. Based on the financial statements, users of financial statements in the form of investors, creditors or other third parties will be able to see further the prospects of the companies concerned. These prospects can see through the financial ratio analysis conducted. According to (Ciaran, 2006) "Data that makes sense", managers, indeed, all of us, are deluged with business data. It comes from internal operating reports, the daily Press, business magazines and many other sources. Much of this data is incomprehensible. The significant issues in business are (1) assets; (2) profits; (3) growth; and (4) cash flow. " There shows that in this case, four variables have an internal network that interconnected with one another. Financial statements, in this case, can manage all the information and will make the company value. Ratio analysis is one that studies the relationships between various types of financial statement items. Financial ratios allow investors to make an assessment of the company's past and future conditions as well as operational results. The benefit derived from the use of financial ratios is to compare the risks and profitability of various companies to help investors and creditors in making a sound investment and credit decisions (White *et al.,* 2002), (Chin and Lee., 2008).

2.3 Return On Assets

Return On Assets (ROA) is a measure of a company's ability to generate profits (returns) for companies by utilizing the assets they have. The greater ROA shows excellent performance. The higher ROA value shows that a company is more efficient in utilizing its assets to earn profits so that the value of the company increases (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Bull, 2008). ROA is a profitability ratio that measures how much a company can increase a company's net profit by using all assets owned by the company. The higher ROA shows that the profit achieved by the company is greater so that it will attract investors to invest their capital in the company. The increasing demand for these shares will later be able to increase the price of the company's shares in the market. Nevertheless, according to the results of studies (Hutauruk, Mintarti and Paminto, 2014) shows that ROA has no significant effect on stock prices. Because the company situation is more optimizing the utilization of investment into the company and not in the dividend distribution. ROA in cigarette companies is quite different in most other manufacturing companies, given the situations and conditions that require huge advertising media.

2.2 Return On Equity

Return On Equity (ROE) is another summary measurement of the company's overall performance is return on equity (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Bull, 2008), (Hutauruk *et al.*, 2016). In this ratio shows the power to generate a return on investment based on the book value of the shareholders and is often used in comparing two or more companies in the same industry High ROE often reflects a company's acceptance of excellent investment opportunities and effective cost management. However, if the company has chosen to apply a high level of debt based on industry standards, a high ROE is only the result of an assumption of excessive financial risk. ROE is a ratio used to measure the level of net income that a company receives from its invested capital. The higher the ROE ratio describes, the better the state of the company so that it will increase investor confidence to invest their capital. ROE in cigarette companies is also in line with other manufacturing companies, where the achievement of the company's profit is made possible through a little possible through the use of financing sources from debt.

2.3 Earning Per Share

Earning Per Share (EPS) is the ratio of earnings per share obtained by dividing the resulting net profit against the number of shares deposited (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Hutauruk *et al.*, 2016). EPS is a market ratio used to measure how much market recognition a company has by comparing net income with the number of shares outstanding on the market. The rising EPS indicates that the company has succeeded in increasing investor prosperity by dividend distribution. There can increase investor demand for shares which in turn will also increase the company's stock price. EPS or Earning per Share or net profit per share is the net income of a company divided by the number of shares issued by a company. These like this, with the assumption that the number of shares of the company does not change. If the net profit of a company goes up, then, of course, the EPS will go up, if the net profit of a company goes down, then the EPS will also definitely go down. However, if the number of shares of a company increases, then, if the net profit rises, the EPS will not necessarily increase, whereas if the net profit falls, the EPS will clearly and go down. The role of EPS in cigarette companies is like that of most EPS in manufacturing companies so that it has a significant effect on stock prices.

2.4 Stock Price

The share price is the present value of income to be received by investors in the future. The stock price shows the achievements of companies that move in the direction of the company's performance. Companies that have excellent achievements can improve their company performance which is reflected in the company's financial statements, so investors will be interested in investing in the company. An increase in investor demand for the company will cause the price of the company's shares to tend to increase as well. The company's financial statements can be a reference for investors in making investment decisions, such as selling, buying, or investing in shares. The stock price can change at any time, depending on the amount of supply, and demand of investors. Factors that can affect the ups and downs of a company's stock price are internal factors and external factors of the company (Schwert, 1990). This study uses company internal factors that reflected in the company's financial statements. The company's internal factors used in the form of financial ratios such as profitability ratios that are proxied by Return on Assets (ROA), Return on

Equity (ROE) and market ratios that are proxied by Earning Per Share (EPS). The share price is formed early on from an issuer's management objective. The main objective of management is to maximize shareholder wealth. Based on these factors, management makes a set of strategic policy decisions. These will undoubtedly affect other external factors, namely capital market conditions. Thus it will also affect the condition of the capital market is the investor's interest in the relevant shares so that it directly affects the stock market price (Hutauruk *et al.*, 2016).

3. RESEARCH FRAMEWORK AND HIPOTHESES

This research focuses on investment returns in the form of return on assets, return on equity and earnings per share and their impact on stock prices based on the support of theoretical and empirical results, the data described as bonded:

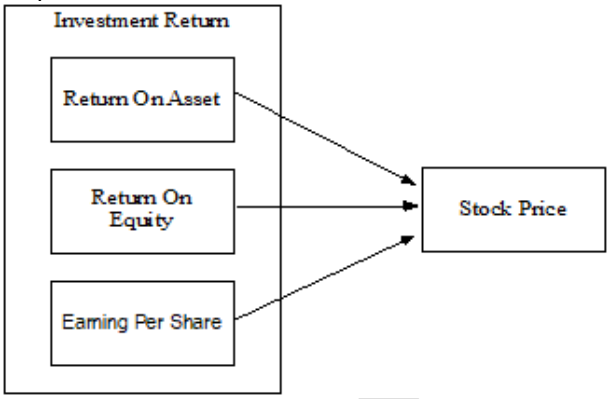

Figure 1 Conceptual Framework

Based on the conceptual framework, the following hypotheses can also state:

H1: Return on assets, return on equity, and earning per share simultaneously affects stock prices
H1: Return on assets affects stock prices
H2: Return on equity affects stock prices
H3: Earning per share affects the stock price

4. METHODOLOGY

The research uses online data in IDX to collect data. The object of the research is cigarette manufacturing sub-sector companies listed on the Indonesia Stock Exchange. Based on the investigations carried out, only three data companies are eligible to be examined, namely with the initials of the company: GGRM, HMSP, and WIIM, where these companies have been listed on the IDX at least from 2012 to 2018 (Indonesia Stock Exchange Research and Development Division, 2019). Furthermore, the financial statements were collected, annual reports and performance reports and closing stock price lists. In this survey, four variables used to be further teste, consisting of Return on Asset (ROA), Return on Equity (ROE), Earning Per Share (EPS) and stock prices.

This study uses a linear regression model of multiple regression, with 5% significance (95% level of confident) and data formulated as bonded:

$Y = a + bX_1 + bX_2 + bX_3 + e$

Where:

Y = Stock Price
a = Constanta
b = Regression coefficients
X_1 = Return on Asset (ROA)
X_2 = Return on Equity (ROE)
X_3 = Earning Per Shares (EPS)
e = error

Further analysis assist by using IBM SPSS Version 25 software to output data analysis results.

5. RESULT AND DISCUSSION

Based on the analysis results and hypotheses testing can be described as follows:

TABLE 1
ANOVA TESTING

Mode		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77.155	3	25.718	31.850	.000[b]
	Residual	13.727	17	.807		
	Total	90.882	20			

a. Dependent Variable: Stock Price
b. Predictors: (Constant), Earning Per Share, Return On Equity, Return On Asset

Based on the Table 1, shows Bahia ROA, ROE and EPS simultaneously have a positive and significant effect on stock prices. These evidenced through the calculation of the significance of the calculated F value greater than the F table or 31,850 > 3.20, at a significance level of 0.000 < 0.005, and so H1 accepted.

TABLE 2
MODEL SUMMARY

Model	R	R Square	Adjusted R Sauare	Std. Error of the Estimate
1	.921[a]	.849	.822	.89860

a. Predictors: (Constant), EPS, ROE, ROA
b. Dependent Variable: Stock Price

The Table 2 above to shows the level of relationship between the variables of this study was 92.1% classified as very strong, while the level of influence between the research variables was 84.9%. At the same time, the remaining 15.1% influenced by other factors outside the research variable and also invoice error.

TABLE 3
COEFFICIENTS

Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.216	.695		6.064	.000
	Return On Asset	.001	.001	.076	.783	.444

	Return On Equity	-.039	.009	-.398	-4.144	.001
	Earning Per Share	.898	.101	.866	8.929	.000

a. Dependent Variable: Stock Price

In table 3 it can be seen that the value of t count ROA is smaller than t table or 0.783 <1.7613 or through a significance value of 4.444> 0.005 which shows no significant effect, and so H2 accepted. Furthermore t calculate ROE is greater than t table or -4.444 <-1.77613 or through a significance value of 0.001 <0.005 which shows a significant effect, so thus H3 is accepted. Likewise, the tcount EPS is greater than t table or 8,929> 1.7613 or through a significance value of 0,000 <0.005 which indicates a significant effect, so that H4 is accepted. This model has also been tested for classical assumptions so that it has been proven to have no interference with multicollinearity, heteroscedasticity and normality of data and has been feasible.

5.1 The ROA, ROE and EPS Simultaneous Effect on Stock Prices

ROA, ROE and EPS simultaneously have a positive and significant effect on stock prices. These shows that H1 is accepted, meaning that the higher the role of integrated ROA, ROE and EPS will increasingly make stock prices increase. The findings of this study are also in line with opinion (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Bull, 2008) in which ROA, ROE and EPS greatly affect stock price movements. The higher ROA, ROE and EPS, issuers, the stock price will increase and vice versa. This condition shows how much market information to the public as an investment decision maker. The public will see the investment ability of an issuer's stock, through its success in creating greater returns that will further increase its attractiveness in the market. ROA, ROE and EPS in this case are good investment performance measurement tools, so that they able to form a new unity in determining the perceptions of investors and market players.

5.2 The ROA Effect on Stock Prices

The results of this study found that ROA has a positive but not significant effect on stock prices or H2 rejected. These shows that the rate of return on investment measured through net income does not guarantee a rise or fall in stock prices in the market. This result is in line with the findings presented by (Hutauruk *et al.*, 2016) in which ROA does not affect stock prices. These results indicate that the return on investment measured by net income before the tax on total investment does not affect market opinion. In this case, it saw that most of the company's profits are used for the development of company investments so that they rarely distributed in the form of dividends. Cigarette companies today are experiencing difficult times in dealing with the contradictory situation of government regulations. So they try optimally to maintain the continuity of their business through investment in marketing, especially in various advertising media, which of course requires a substantial and sustainable cost. Thus the results of studies proposed by (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Bull, 2008) cannot be accepted in this situation. In this situation, human psychology factors play an essential role in decision making, which naturally adjusts to existing conditions (Hutauruk *et al.*, 2019).

5.3 The ROE Effect on Stock Prices

The analysis results in this study also show that ROE has a positive and significant effect on stock prices, or in this case, H3 accepted. The higher the ROE, the higher the stock price will be. The findings of this study are also able to confirm the results of previous studies conducted by (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Bull, 2008), and (Hutauruk *et al.*, 2016)., where ROE has a negative and significant effect on stock prices. The higher the value of ROE, the lower the stock price and vice versa. ROE value represents the return on investment measured by the achievement of net profit before tax on the amount of equity held. Thus any achievement of net profit before tax is generated through equity or debt, capital and retained earnings. These also show the efficiency of the use of company funding sources that can be absorbed in its operations. Thus, the higher the value of ROE, then illustrates the use of sizable debt, and vice versa, so that investors see the situation as a condition that illustrates the company's ability to fund its operations. The market will feel confident if the use of investment can realize by using a little of the source of capital sourced from debt.

5.4 The EPS Effect on Stok Prices

The analysis shows that EPS has a positive and significant effect on stock prices or in this case H4 accepted. These findings are in line with the opinions of the results of previous studies conducted by (Subramanyam and Wild, 2010), (Horne and Wachowicz, 2012), (Brigham and Houston, 2009), (Tjia, 2009), (Ciaran, 2006), (Hutauruk *et al.*, 2016), where the role of EPS is very influential on stock prices because investors are more looking at the company's ability to generate profits in each share issued. As long as the related company cannot increase its EPS or remain stagnant, it is considered a bad company (Penman *et al.,* 2006). PS or earnings per share is the level of net profit for each share that can be achieved by the company when running its operations. EPS obtained from the profit available to ordinary shareholders divided by the average number shares outstanding. One reason investors buy shares is to get dividends, and if the value of earnings per share is small, then it is also less likely for companies to distribute dividends. So it can be said investors will be more interested in stocks that have high earnings per share compared to stocks that have low earnings per share. Low earnings per share tend to make the stock price go down.

6. CONCLUSION

ROA, ROE and EPS are a series of financial ratio tools to measure profitability or financial performance in a company. In cigarette sub-sector companies listed on the Indonesian stock exchange, the ROA, ROE and EPS factors can simultaneously and positively and significantly influence stock prices. That is, the profitability factor shows the company's ability to get the return on investment for all sacrifices that have made. In terms of return on investment as measured by a comparison of total assets (ROA) shows a positive and not significant effect on stock prices. These show that the higher the profits generated by the company, the majority is also used for investment development so that the market responds to the value of ROA,

the share price will be smaller. It was also shown that the value of ROE is a benchmark of profitability of the company supported by debt inclusion to third parties or with high risk, so that the greater the ROE, the lower the share price will be. These are a market response to the risks borne by the company, which is also getting more significant. EPS value is an illustration of how much profit generated per share outstanding. These also show that net profit is ready to be distributed to shareholders so that the higher the profits obtained by investors based on each share will illustrate the prosperity of shareholders. For cigarette sub-sector companies, the role of profitability ratios is very beneficial for investors in making investment decisions in the future, bearing in mind that government policies that raise high cigarette customs can affect the achievement of sales and corporate profits in EPS so that it affects public opinion and stock prices. Advertising must be improved by the company and using environmentally friendly attributes will be better.

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