The Effect of Earning Surprise and Earning per Share on Stock Return

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Abstract: A lot of investors are currently focusing on corporate earnings information, resulting on stock market reacts more strongly to unexpected earnings. The reaction is caused by several factors such as *earning surprise (ES)* and *earning per share (EPS)*. Based on these, the research was conducted to find out how ES and EPS affect on stock return of manufacturing companies listed on Indonesia Stock Exchange in 2016–2018. This research is quantitative descriptive with associative research methods. The data used in this research were annual reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2016–2018. Sampling in this research was conducted using a purposive sampling method. The results showed that simultaneously and partially EPS and ES variables have no effect.

Keywords: earning surprise (ES), earning per share (EPS), stock return

BACKGROUND

Investment decision on financial market largely is influenced by financial statement information. One of the main objectives of financial statements is to assist users in decision making. One important factor in financial statements is the disclosure of information related to revenue. In an efficient capital market, one important information key for investors in investment decisions is company performance (Goetzmann, 1999). Good performance of the company is an achievement of the company's ability to produce optimal revenue. Ball (1968) shows that investor reactions to companies with good earnings reports generate positive *returns*. They also observed that investors' reactions to companies with poor earnings reports resulted in negative *returns*.

Many empirical studies focus on market reaction to information on corporate earnings. In several published studies, the stock market react more strongly to unexpected earnings for some companies than for other companies. Scott (2003) reinforces this theory with his findings indicating that various stock market reactions are caused by several reasons, including *Earning Surprise (ES*) and EPS.

In a period of reporting corporate earnings, Kinney et al. (2002) explain the term *Earning Surprise (ES)* as the difference between the value of earnings forecast and the value of earnings announcements.

Hartono (2010) states that the main reason for investors to invest in a company is to gain an optimal return. Stock return is the level of profit that can be gained by investors on investments made in a company. Stock *return* can be in form of dividends or capital gains. Weygandt et al. (2005) defines dividends as proportional distributions by companies to their shareholders.

As explained by Riyatno (2007), the profit achieved by a company is one measure of performance and is considered by investors or creditors in making decisions to make investments or to provide additional credit. Thus, it is expected that *earning surprise (ES)* and EPS affect the company's *return*.

LITERATURE REVIEW

Signalling Theory

Wolk, et al. (2001) state signal theory as a theory that explains the reasons for companies in presenting information for the capital market. In addition, signal theory explains the difference in the proportion of information obtained between investors and management, which is also called information asymmetry. The relationship between signal theory and this research relates to the signals given by management to investors and potential investors in the form of earnings per share (earnings per share realization). Maria Immaculatta (2006) states that the quality of information disclosed by management can influence investor decisions. Therefore, the signals given by management in the capital market can be divided into 2, *good news* and *bad news*.

Stock Returns

Ang (1997) defines stock return as a profit which is the main goal by investors of any short-term or long-term investment, both directly and indirectly. There are 2 types of stock *returns*, dividends and capital gains (profits derived from the price difference). Weygandt et al. (2005) defines dividends as distributions by companies to their shareholders proportionally.

Earning Surprise

According to Asih and Gudono (2000), the company has a signal of reported earnings about future profits. In this case the unexpected profit "surprise" is a *signalling technique* intended to provide a signal for making more accurate predictions. Various profit forecast models are a way to determine the expected *returns*. Surprise is an event or something experienced by investors outside of their predictions so that it can cause various kinds of responses.

Earnings per Share

Supadi (2017) define that the level of profit obtained by shareholders on earnings (per share) can be seen by the ratio of Earning per share (EPS). This ratio shows the company's performance, especially from the profitability associated with the market. The higher the EPS, the higher the profit per share, and the same goes for it. This has an impact on the level of the company's stock return ability in the capital market. Therefore, a stable company will show the stability of EPS growth, on the other hand an unstable company will show fluctuating growth. However, there are also several companies whose EPS values have decreased even though their share prices have increased.

Hypotheses

Effect of Earning Surprise against Stock Return

Research conducted by Ridhmadhantia (2010), Jones and Frank Bacon (2007), and Vestari (2012) provide empirical evidence that *earnings surprises* influence stock prices. This causes anomaly *returns* received by investors. Investor optimism causes negative *earnings surprises* therefore it has a negative effect on stock *returns*. While pessimism is the reason for positive *earnings surprises* and a positive effect on stock *returns*. Based on the explanation above, the hypothesis stated by the researchers in this research is:

H1: *Earnings surprises* affect stock *returns*

Effect of Earnings per Share on Stock Returns

Research conducted by (Ulfyana and Purwanto, 2011), (Putri and Sampurno, 2012) and

(Savitri and Haryanto, 2012) provide empirical evidence that EPS has a positive effect on stock prices. It also causes anomaly *returns* received by investors. Based on the explanation above, the hypothesis stated by the researchers in this research is:

H2: EPS affects stock *returns*

RESEARCH METHOD

This research is quantitative descriptive with associative research methods. Correlations and causal relationships between variables are obtained from associative research (Sulistyanto et al., 2000). This research uses an explanatory approach. The purpose of this approach is to describe the relationship (causality) between variables through hypothesis testing (Sugiyono, 2010). Based on a quantitative approach, this research is also called a confirmatory research that focuses on confirming the theory to apply to a particular research object, both for explanation and prediction (Sugiyono, 2010).

Operational Definition and Variable Measurement

Dependent variable

Stock Returns

Weygandt et al. (2005) define dividends as distributions by companies to their shareholders proportionally. This return is the level of profit that an investor gains on his investment activities. There are 2 types of stock *returns*, dividends and capital gains (profits derived from the price difference).

In this research, stock *returns* is calculated using the formula (Fahmi, 2012. In Nurzahra, 2021):

$$Stock\ Return = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Independent Variable

Earnings Surprises (ES)

Earnings are expected to be related to the results of investor expectations of the financial information it receives (Skinner and Sloan, 2002). The value obtained from earning surprise illustrates the company's performance to meet investor desires.

In accounting, research that used expected data is measured using sun expected earnings (SUE). Therefore, *earnings surprises* in this research will be measured using the difference between realized quarterly EPS and expected quarterly EPS. The measurement of *earnings surprises* with the naive model is as follows (Asih, 2000):

$$UEit = \frac{profit_{t} - profit_{t-1}}{profit_{t-1}}$$

The results obtained will be grouped based on three indicator values, the value of -1 if earnings surprise is negative, the value of 0 if *earnings surprises* is 0, and the value of 1 if *earnings surprises* is positive.

Earnings per Share (EPS)

Earning per share (EPS) is a ratio that can show the level of profit that investors get, where the level of profit (per share) shows the company's performance, especially from the profitability associated with the market. The higher the profit, the higher the company's stock return in the capital market.

In this research EPS is calculated using the formula (Fahmi, 2012. in Nurzahra, 2021):

$$EPS = \frac{EAT}{J_{sb}}$$

Information:

EPS = *Earning per share*

EAT = *Earnings after tax* or after-tax income

J_{sb} = Number of shares outstanding

The data used in this research were annual reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2015–2018. This research sample was done by *purposive sampling*, which is the sampling technique with certain considerations (Sugiyono, 2010). The criteria considered in research sampling are manufacturing companies that have been listed on the Indonesia Stock Exchange before December 31, 2015 and are still registered as of December 31, 2018. Manufacturing companies that have annual reports ending on December 31, manufacturing companies present complete data related to the variables of the research.

The analysis technique used in this research is multiple linear regression analysis with the consideration that this analysis technique can be used as a prediction model of company performance with product innovation, process innovation, and organizational innovation. This hypothesis test was carried out using the SPSS 18.0 program. The regression model used to test the hypothesis will be formulated as follows:

$$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + e \quad \text{.....(1)}$$

Information:

Y : *Stock return*
α : Constant
$\beta1....\beta n$: Coefficient of regression direction
X1 : *Earning surprise*
X2 : *Earning Per Share*
X3 : Organizational innovation
e : Residual Error

RESULTS AND DISCUSSION

Research Result

The research results from the data are in the form of descriptive statistics which can be seen as follows:

Table 1 Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
RS	.3227	.30933	74
ES	.2088	.14798	74
EPS	3.1887	2.28369	74

Based on the table above, it can be concluded that:

1. ES value has a mean value of 0.21 which is smaller than the mean RS value of 0.32. In this sense, the value obtained from earnings surprise illustrates the company's performance to meet the desires of investors. So that the growth of ES has a performance that does not meet the wishes of investors.
2. EPS has a mean value of 3.19 which is greater than the mean RS value of 0.32. In this sense, the greater the company's ability to generate profits per share for its owner, this will affect the company's stock return on the capital market.

Classic Assumption Test

Normality Test

Table 2 Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Residual	.064	74	.215	.990	74	.635

Kolmogorov-Smirnov test, it can be seen that the significance of residual errors is above 0.05 so it can be concluded that residual errors are normally distributed.

Autocorrelation Test

Table 3 Autocorrelation Test

Model	Durbin-Watson
1	1.842

Table 4 Multicollinity Test

Model	Collinearity Statistic	
	Tolerance	VIF
ES	.72	1.402
EPS	.69	1.909

By looking at the VIF number of each independent variable below 10, it can be concluded that the independent variables are free from multicollinity.

Heteroskedastic Test

Table 5 Heteroskedastic Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.310	.076		4.097	.000
	ES	-.043	.253	-.020	-.169	.866
	EPS	.007	.016	.049	.406	.686

a. Dependent Variable: RS

By using the Glesjer Test, the significance of each independent variable on absolute residuals is not significant so that the variance of the research data is said to be heteroskedastic.

Multiple Regression Analysis

Table 6 Multiple Regression (Coefficient)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.310	.076		4.097	.000
	ES	-.043	.253	-.020	-.169	.866
	EPS	.007	.016	.049	.406	.686

a. Dependent Variable: RS

The resulting regression equation is:
Stock Return = 0.310 - 0.043ES + 0.007EPS
Managerial implications of this equation are:

1. Stock return has a value of 0.310 percent where the other variables are constant.
2. Stock *returns* have a 0.043 percent decrease for every 1 percent increase in ES and other variables are constant.
3. Stock *returns* will have a 0.007 percent increase every 1 percent increase in EPS other variables are constant.

Table 7 Uji F (Anova)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.017	2	.008	.087	.917[b]
	Residual	6.968	71	.098		
	Total	6.985	73			

a. Dependent Variable: RS
b. Predictors: (Constant), EPS, ES

Based on the results of the F test, the simultaneous ES and EPS have no effect on the total stock.

Correlation and Determination Coefficient

Table 8 Correlation & Determination Coefficients

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.049[a]	.002	-.026	.31328	1.842

a. Predictors: (Constant), EPS, ES
b. Dependent Variable: RS

Discussion

1. Hypothesis Test 1: Earning Surprise has no effect on Stock Return

This period has a mean value of 0.21 which is smaller than the mean RS value of 0.32. In this sense, the value obtained from earnings surprise illustrates the company's performance to meet the desires of investors. So that the growth of ES has a performance that does not meet the wishes of investors. Earnings are expected to be related to the results of investor expectations of the financial information it receives according to Skinner and Sloan (2002). In this research, the company did not provide a good performance of investors' expectations or expectations of the financial information received. It can be concluded that the presence or absence of earnings surprises does not affect a company's stock returns, it arises because investors will only see the

company's net income on a regular basis, not earnings surprises which do not necessarily appear regularly.

2. Hypothesis Test 2: Earning per Share has no effect on Stock Return

EPS has a mean value of 3.19 which is greater than the mean RS value of 0.32. In this sense, the greater the company's ability to generate profits per share for its owner, this will affect the company's stock return on the capital market. But in this research the earnings per share that is hinted by investors are not proportional to the realized *returns*. The results of this research do not agree with Ang (1997), that the increasing EPS will increase the attractiveness of investors in investing funds into the company, so that stock prices will increase. Rising stock prices will affect the increase in total *returns* obtained by investors. It can be concluded that earnings per share have no effect on stock returns because there are still many factors including the unfavorable market environment.

CONCLUSION

Partially, ES has no effect on stock *returns* neither with EPS that partially has no effect on stock *returns*. The relationship between the independent variable and the dependent variable is weak. The contribution of the independent variable to explain the dependent variable model is 0.2%.

Suggestion that can be put forward is:

1. Adding company fundamental variable factors besides ES and EPS. Because the neglect of other fundamental factors can actually have an influence on the company's total *return*.

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