

## The Effect of Income Smoothing and CSR Disclosure on Market Performance

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ARTICLE INFO	ABSTRACT
<p>Article History</p> <p>Received 20 December 2020; Accepted 7 June 2021</p> <hr/> <p><i>JEL Classifications</i> G32, L25, L30, O34</p>	<p><b>Purpose:</b> The main aim of the study was to determine the effect of income smoothing and CSR disclosure whether it affects market performance which is divided into 3 aspects, namely market response (CAR), market risk (SD), market value (MVE) in manufacturing companies in Indonesia. This study uses a basic theory, namely agency and signals are used to explain how the income smoothing company that makes CSR disclosures affects market performance.</p> <p><b>Design/methodology/approach:</b> This study uses secondary data, namely financial reports that was accessed through the Indonesian Stock Exchange page. The sample in this study was 37 manufacturing companies listed on the Indonesia Stock Exchange for the period 2014 - 2019. The research hypothesis was tested using multiple linear analysis with the SPSS test tool.</p> <p><b>Findings:</b> This study found that companies that perform income smoothing have an effect on market response (CAR) and market risk (SD), while CSR disclosure has an effect on market performance, which is calculated through 3 aspects CAR, SD, and MVE.</p> <p><b>Research limitations/implications:</b> One of the problems in this research is the calculation of the abnormal return value in only 30 days due to the limitations of the research. This research is for companies in order to reduce income smoothing actions because it has a negative correlation to market reactions and companies can increase CSR disclosure because it will have a positive value for the company.</p> <p><b>Originality/value:</b> This study contributes to the theory of empirical testing regarding the effect of income smoothing practices and CSR disclosure on market performance. This study also adds new variables and extends the time span for calculating abnormal returns from related studies. Further studies can add variables that have a positive correlation to market performance and extend the range of calculating the abnormal return value.</p>
<p><b>Keywords:</b> Income Smoothing, CSR Disclosure, Market Response, Market Risk, Market Value.</p>	

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### 1. Introduction

Market performance is a concept to measure the company's performance on what has been done. Market performance is very important because it is needed to demonstrate the effectiveness of competition, the ability to achieve product profits and business efficiency through sales. Sudana (2011) market performance is a reference that is considered as an assessment of the extent to which a company can increase the value of company shares that are already traded in the capital market.

Informed announcements will automatically cause the market to react. The market reaction is indicated by changes in stock prices in the market, the response given by the market to published financial reports is indicated by the value of Cumulative Abnormal Return (CAR). In making a decision to invest, of course, investors will think about how much risk that will be borne in investing. Risk and return have a positive and unidirectional relationship, where the greater the risk borne, the greater the return will be compensated. Investors will pay attention to the company's stock price trends to assess the company's performance. Investors can judge whether a company is good or bad

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through the company's market value. Harrison (2012) said "market value varies depending on the net income earned by the company, financial position, and the company's prospects in the future, as well as economic conditions. Market value is the overall value that occurs in the stock market in a certain period of time" (Ratnasari et al., 2014). Prices will reflect market players' expectations of market value.

According to agency theory, one way that is expected to be in accordance with the objectives of Principals and Agents is through reporting Luayyi (2012). Management realizes the importance of information regarding earnings, resulting in an attitude or behavior that should not be carried out by management, namely by performing income smoothing to overcome various problems that arise between management and various parties who have interests in the company. The attention of investors tends to pay attention only to the profit figures in the financial statements without considering the process that the company undertakes in creating that profit Algery (2013). Apriwandi and Pratama (2014), Dewi et al. (2018) the studies provides evidence that income smoothing has a effect on market reactions. Sjafrudin Redjab et al. (2014) gave different results where these two studies showed that the income smoothing action had no effect on market performance through stock market risk which was proxied by standard deviation (SD).

In signal theory, the positive things that are given by the company make investors interested in investing their capital, because this positive information indicates that the company has good performance in the future. Managers are generally motivated to convey good information to the market, and directly the market will react to good information conveyed. Vladu (2013) shows that users of financial statements today tend to rely on income statements, especially to assess the success of companies. In line with Hessayri and Saihi (2015) it is stated that accounting profit is a major concern for shareholders because it is a reflection of company performance. CSR disclosure is indicated to affect market performance. Research conducted on the European market found that corporate involvement in CSR disclosure has a positive impact on the company's stock price Cellier and Chollet (2011). The more companies disclose their CSR, the more investors will be interested in investing in the company. Cheng and Christiawan (2011), Miller and Wikstrom (2016), Ender and Brinckmann (2019), investors tend to react positively to disclosures related to society and the environment. Haryono and Rusdiah (2015), Thanaya and Widanaputra (2019) state that CSR disclosure has a significant effect on corporate risk (SD) in the mining sector.

Because not many studies have been conducted using 3 aspects in calculating market performance, the researchers are interested in using these three aspects in this study to calculate market performance. Different from previous research conducted by Dewi et al. (2018), this study adds a CSR disclosure variable as an independent variable because information about CSR disclosure carried out by companies contains information that is indicated to react to market performance. In this study, market performance is divided into 3 aspects, namely: market response (CAR), market risk (SD), and market value (MVE). This research also adds to the observation period of the cumulative abnormal value of the 30-day span to calculate the abnormal return value, with the object of research being manufacturing companies. Manufacturing companies were chosen because researchers also wanted to see whether income smoothing had an effect on market performance as calculated by SD in manufacturing sector companies where previous studies of Haryono and Rusdiah (2015) Thanaya and Widanaputra (2019) stated that CSR disclosure has a significant effect on market risk (SD) in the mining sector.

## **2. Review of Literature**

### **2.1 Theoretical Review**

Earnings management arises as a result of the impact of an agency problem that occurs because there is a misalignment of interests between the principal and the agent which is called the agency problem. Agency problems arise when the principal has difficulty ensuring that the agent acts to maximize the principal's welfare Yushita (2010). The topic of income smoothing is closely related with the concept of earnings management, just like earnings management, the income smoothing concept also uses agency theory approach. According to agency theory, one way that is expected to be in accordance with the objectives of Principals and Agents is through reporting Luayyi (2012). Management realizes the importance of information regarding earnings, resulting in an attitude or behavior that should not be carried out by management, namely by performing income smoothing to overcome various problems that arise between management and various parties who have interests in the company.

The positive thing about signalling theory is that it can differentiate companies that have good information/news from companies that have bad news. Godfrey et al. (2009) signal theory talks about managers who use accounts in financial statements to provide signals for future purposes. According to Hartono (2010), information published as an announcement will provide a signal for investors to make investment decisions. The announcement contains a good signal (good news), the market is expected to react to the large number of investors investing, but on the other hand, if the signal is (bad news), investors will not investing. Apriwandi and Pratama (2011) stated that the expectation of CSR disclosure can increase the market value and reputation of the company by increasing share prices.

### **2.2 Previous studies**

Research on the effect of income smoothing on market performance and the effect of CSR disclosure on market performance has been carried out by several previous researchers including research conducted by Apriwandi and Pratama (2014), Paramita (2017) providing evidence that income smoothing has a positive effect on market reactions that are proxied by cumulative abnormalities. return (CAR), the results of this study are different from the results of research conducted by Dewi et al. (2018), Alwiyah and Solihin (2015), Istifirda (2015) and Aflatooni and Nikbakht (2009) proving that income smoothing has an effect negative to CAR.

Research conducted by Setiadi, Purnamasari, and Setiany (2015), Indriani and Harnovinsah (2015), Yulianti and Sapta (2016), Fumami and Moghadam (2015), which gave results that income smoothing had no effect on Cumulative Abnormal Return (CAR), this research uses the calculation of the CAR value of less than 30 days. Sjafrudin Redjab et al. (2014) conducted a study with the result that market reaction (CAR) was not related to earnings management which was proxied by income smoothing. Putra and Wiwin (2013) provide results that stock market risk has differences between income smoothing companies and companies that are not income smoothing. Research by Dewi et al. (2018) and Sjafrudin Redjab et al. (2014) gave different results where these two studies gave results that the income smoothing action had no effect on stock market risk which was proxied through standard deviation (SD). Khotimah, Warsini and Nuraeni (2012), the results of the research prove that earnings management has a positive effect on MVE, inversely proportional to the research conducted by (Dewi et al. 2018).

Previous research on the topic of the effect of disclosure of corporate social responsibility on market performance was carried out by Astuti and Nugrahanti (2015), Maturbongsi and Budiharta (2016), showing that CSR disclosure has no effect on market reactions proxied by CAR. Miller and Wikstrom (2016), the results of their research prove that CSR disclosure has a positive effect on CAR, this research is supported by research conducted by Ender and Brinckmann (2019), Cheng and Christiawan (2011), Darmadi and Gunawan (2013).

Previous research on market performance represented by aspects of market risk (SD) was conducted by Sjafrudin Redjab et al. (2014) the results of the study showed that market reactions were not related to earnings management. Research by Haryono and Rusdiah (2015), Thanaya and Widanaputra (2019), these two researchers gave the same results where CSR disclosure has a significant effect on firm risk (SD) in the mining company, this research had different company with Sjafrudin Redjab et al. (2014). Previous research on market performance proxied by the aspect of market value (MVE) was carried out by Suhardjanto, Nugrahani, and Accounting (2012), the results of the study showed that CSR disclosure had a positive effect on MVE, this result was supported by research conducted by Husser and Evraert-Bardinet (2015) and Reverte (2016), Corporate social responsibility disclosure and market valuation: evidence from Spanish listed firms. Based on the description above, the hypotheses that can be formulated are:

H1a: Income smoothing has a positive effect on market performance as proxied by market response (CAR).

H1b: Income smoothing has a positive effect on market performance, which is proxied by market risk (SD).

H1c: Income smoothing has a positive effect on market performance, which is proxied by market value (MVE)

H2a: CSR disclosure has a positive effect on market performance as proxied by market response (CAR).

H2b: CSR disclosure has a positive effect on market performance, which is proxied by market risk (SD).

H2c: CSR disclosure has a positive effect on market performance, which is proxied by market value (MVE).

### 3. Methodology

This research means quantitative research. This study uses secondary data, namely financial reports that was accessed through the Indonesian Stock Exchange (IDX) page. The data used in this study were obtained through the website www.idx.co.id. The sample in this study consisted of 37 Manufacturing companies on the Indonesian Stock Exchange (IDX) for the 2014–2019 period. In this study, income smoothing becomes the independent variable (X1), the disclosure of corporate social responsibility (CSR) becomes the independent variable (X2) and the dependent variable, namely Market Performance (Y). The research hypothesis was tested using multiple linear analysis and test tool used a statistical analysis program, namely SPSS. The population in this study were all manufacturing companies listed on the Indonesia Stock Exchange for the period 2014–2019, the sampling method used was purposive sampling. Purposive sampling criteria in this study are:

**Tabel. 1 Sample Selection Criteria**

Sample Selection Criteria	Jumlah
Manufacturing companies listed on the Indonesia Stock Exchange for the period 2014–2019.	169 companies
Companies that have not published financial statements in a row for 6 years	(7 companies)
The company has negative profits	(80 companies)
<b>Initial Samples</b>	<b>82 companies</b>
Companies non-smoother	45 companies
<b>Number of Research Samples</b>	<b>37 companies</b>

This study uses an initial sample of 82 companies, companies that are sampled are companies selected based on the criteria that have been made as shown in the table above. In this study, the sample was divided into two categories, namely smoother and non-smoother companies. A more refined company is a company that practices income smoothing in its financial reporting. Manufacturing company was chosen as the initial population because previous research proved that IS was mostly done by manufacturing companies. Of the 82 companies that were the initial samples, there were 37 companies that carried out income smoothing actions. So that the final sample in this study amounted to 37 income smoothing companies which became the final sample in this study.

### 3.1 Measurement of Study Variables

#### 3.1.1 Dependent Variable

This study is a replica study of previous research conducted by Dewi et al. (2018) where market performance in this study is categorized into three aspects, namely market response, market risk, and market value. Calculating the value of market performance is divided into 3 aspects, namely:

Market Response is chosen as one of the market performance measures because of the stability of market response marks the stability of the business, in the perspective of today's investors means stable earnings per share and stable capital gains.

$$CAR = \sum_t AR_t$$

Information: CAR = Cumulative Abnormal Return, AR = Abnormal return in day t.

To find AR, the following formula is used:

$$AR_t = \left(1 - \frac{SP_1}{SP_{t-1}}\right) - \beta \left(1 - \frac{IHSG_1}{IHSG_{t-1}}\right)$$

Information : AR = Abnormal Return, SP = The share price of the company, IHSG = Indonesian stock price index, B = stock beta

Market Risk, selected as one aspect of market performance, (from the perspective of potential investors) because it is diprospective investor's perspective, and risk is one of the most factored into their decision. a company can yield a return or loss for their investment is determined by their view on said company's market response.

$$SD = \sqrt{\frac{\sum (X_i - X)^2}{n}}$$

Information: SD = Standard deviation, Xi = stock return of each company in the observed period, X = estimated stock returns, which is the average stock turnover during the observed period, n: The number of days in the observed period. Standart deviation of stock return is chosen to be the proxy of market risk because it is the most common method to me a sure stock risk.

Market Value, is chosen to be a measure of market performance from a management perspective. The reason is because market value is seen as an incentive for management to increase by smoothing income because it is based on an increase or decreasing the company's market value, management will get a good performance report. Market value equity was chosen because the study model wanted to see the company value in the market aspect.

$$MVE_{c,t} = Ln (P_{c,t} \cdot X \cdot N_{c,t})$$

Information : MVE = Market value of equity, average share price during the observed period , N = The number of stock issued, c = company , t =years

#### 3.1.2 Independent Variables

Companies will be classified into groups of companies that carry out income smoothing practices and do not perform income smoothing practices, using the Eckel Index (1981). The Eckel index for companies that practice income smoothing is <1, while companies that do not practice income smoothing are 1 (Eckel, 1981).

$$\text{Eckel Indeks} = \frac{CV \Delta I}{CV \Delta S}$$

Information: I = Change in profit in one period, S Change in sales in one period, CV = The coefficient of variation (standard deviation/expected value).

The disclosure of Corporate Social Responsibility in this study uses 6 indicators based on the Global Reporting Initiative (GRI) by grouping CSR information into 6 indicators, namely: economy, environment, labor practices, human rights, society, and product responsibility. Furthermore, to calculate CSRI, this study uses a dichotomy approach, where each CSR item in the research instrument is given a value of 1 if the company makes disclosures, and a value of 0 if the company does not disclose. The CSRI disclosure calculation formula is as follows:

$$CSRDI = \sum \frac{X_{ij}}{n_j}$$

Information: CSRIj = The company's Corporate Social Responsibility disclosure index j, Nj = Number of items for the company j, nj ≤ 79, Xij = Dummy variabel: 1= if item i make disclosure: 0 = if item i did not make disclosure.

### 3.2 Analytical models

The equation model in this study:

$$\text{Equation I} \quad : \text{CAR: } a + \beta_1 \text{ income smoothing} + \beta_2 \text{ CSRDI} + e \quad (1)$$

$$\text{Equation II} \quad : \text{SD: } a + \beta_1 \text{ income smoothing} + \beta_2 \text{ CSRDI} + e \quad (2)$$

$$\text{Equation III} \quad : \text{MVE: } a + \beta_1 \text{ income smoothing} + \beta_2 \text{ CSRDI} + e \quad (3)$$

#### 4. Results

This section presents the empirical findings and interpretations of the research.

##### 4.1 Multiple Linear Regression Analysis

In this study, there are 3 methods used in calculating market performance (Y) so that there are 3 regression model equations:

**Tabel. 2 Multiple Linear Regression Analysis Equation I  
Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.042	.024		-1.733	.085
PL	-1.417	.000	-.329	-4.691	.000
CSRDI	.075	.045	.118	1.677	.005

a. Dependent Variable: CAR  
Source: processed data (2020)

The output results above are entered into the following equation:

CAR:  $-.041 - 1,417 * \text{Income Smoothing} + 0,75 * \text{CSRDI} + e$ . The above equation can be considered as follows:

If other variables are constant, CAR value will change by itself at a constant value, namely  $-.041$ .

If other variables are constant, CAR value will change by  $-1,417$  for each income smoothing.

If other variables are constant, CAR value will change by  $0,75$  for each CSRDI.

**Tabel. 3 Multiple Linear Regression Analysis Equation II  
Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.200	.056		3.598	.000
PL	5.631	.000	.061	.808	.020
CSRDI	.014	.103	.010	.134	.014

a. Dependent Variable: SD  
Source: processed data (2020)

The output results above are entered into the following equation:

SD :  $0,200 + 5,631 * \text{Income Smoothing} + 0,014 * \text{CSRDI} + e$ . The above equation can be considered as follows:

If other variables are constant, SD value will change by itself at a constant value, namely  $0,200$ .

If other variables are constant, SD value will change by  $5,631$  for each income smoothing.

If other variables are constant, SD value will change by  $0,014$  for each CSRDI.

**Tabel. 4 Multiple Linear Regression Analysis Equation III  
Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2538.649	67.672		37.514	.000
PL	2.095	.000	.184	2.471	.064
CSRDI	135.399	125.008	.081	1.083	.028

a. Dependent Variable: MVE  
Source: processed data (2020)

The output results above are entered into the following equation:

MVE :  $2538,649 + 2,095 * \text{Income Smoothing} + 135,399 * \text{CSRDI} + e$ . The above equation can be considered as follows:

If other variables are constant, MVE value will change by itself at a constant value, namely  $2538,649$ .

If other variables are constant, MVE value will change by  $2,095$  for each income smoothing.

If other variables are constant, MVE value will change by  $135,399$  for each CSRDI.

#### 4.2 Simultaneous Test Results (Test f)

This test is also carried out to support the model in which it is appropriate or feasible so that the results of the statistical analysis test are not biased. The real level used in the F test is 5% (0.05). The results of the simultaneous test (f test) in this study are as follows:

**Tabel. 5 Simultaneous Test of Equation I**  
ANOVA<sup>a</sup>

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.156	2	.078	14.546	.000 <sup>b</sup>
	Residual	.975	182	.005		
	Total	1.131	184			

a. Dependent Variable: CAR

b. Predictors: (Constant), CSRDI, PL

Source: processed data (2020)

From the results of the table output above, it can be seen that the significance value in the table above is 0.000 < 0.05, so it can be concluded that the estimated linear regression model I is suitable for explaining the influence between variables.

**Tabel. 6 Simultaneous Test of Equation II**  
ANOVA<sup>a</sup>

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.019	2	.009	.327	.022 <sup>b</sup>
	Residual	5.190	182	.029		
	Total	5.209	184			

a. Dependent Variable: SD

b. Predictors: (Constant), CSRDI, PL

Source: processed data

From the results of the table output above, it can be seen that the significance value in the table above is 0.022 < 0.05, so it can be concluded that the estimated linear regression model II is appropriate to use to explain the influence between variables.

**Tabel. 7 Simultaneous Test of Equation III**  
ANOVA<sup>a</sup>

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	273013.983	2	136506.992	3.235	.042 <sup>b</sup>
	Residual	7679003.855	182	42192.329		
	Total	7952017.838	184			

a. Dependent Variable: MVE

b. Predictors: (Constant), CSRDI, PL

Source: processed data

From the results of the table output above, it can be seen that the significance value in the table above is 0.042 < 0.05, so it can be concluded that the equation model III linear regression is estimated to be suitable to explain the influence between variables.

#### 4.3 Hypothesis Test Results (t test)

Partial test (t test) which was carried out gave results, the significance level used in this test is 5% (0.05), which means that: Significant value < 5%, meaning that there is effect. Significant value > 5%, meaning that there is no effect.

Based on Table 1 regression equation model I, it can be seen that the income smoothing variable has a regression coefficient value of -1.417 with a significance level of 0.000 < 0.05. This proves that the income smoothing variable has a negative effect on market response, which is proxied by means of Cumulative Abnormal Return (CAR). H1a is rejected.

Based on Table 2 regression equation model II, it can be seen that the income smoothing variable has a regression coefficient value of 5.631 and with a significance level of 0.020 < 0.05. This proves that the income smoothing variable has a positive effect on market risk, which is proxied by Standard Deviation (SD). H1b accepted.

Based on Table 3 regression equation model III, it can be seen that the income smoothing variable has a regression coefficient value of 2.095 and with a significance level of  $0.064 > 0.05$ . This proves that the income smoothing variable has no effect on market value, which is proxied by Market Value Equity (MVE). H1c is rejected.

Based on Table 1, regression equation model I, the CSRDI variable has a coefficient value of 0.075 and with a significance level of  $0.005 < 0.05$ . This proves that the CSR disclosure variable (CSRDI) has a positive effect on market response, which is proxied by Cumulative Abnormal Return (CAR). H2a is accepted.

Based on Table 2 regression equation model II, the CSRDI variable has a coefficient value of 0.014 and with a significance level of  $0.014 < 0.05$ . This proves that the CSR disclosure variable (CSRDI) has a positive effect on market risk, which is proxied by Standard Deviation (SD). H2b is accepted.

Based on Table 3 regression equation model III, the CSRDI variable has a coefficient value of 135.399 and with a significance level of  $0.028 < 0.05$ . This proves that the CSR disclosure variable (CSRDI) has a positive effect on market value, which is proxied by Market Value Equity (MVE). H2c is accepted.

#### 4.3.1 Determination Coefficient Test Results

The results of the coefficient of determination in this study are as follows:

**Tabel.8 The coefficient of determination (R square) of Equation I Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.371 <sup>a</sup>	.138	.128	.07319407

a. Predictors: (Constant), CSRDI, PL

b. Dependent Variable: CAR

Source: processed data

The regression equation model I shows that the adjusted R-square value is 0.128. This explains that the independent variables, namely income smoothing (X1) and CSR disclosure (X2), are able to influence the dependent variable, namely market response (Y1) of 12.8% while the remaining 87.2% is influenced by other factors outside of this study.

**Tabel. 9 The coefficient of determination (R square) of Equation II Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.182 <sup>a</sup>	.161	.106	.16887070

a. Predictors: (Constant), CSRDI, PL

b. Dependent Variable: SD

Source: processed data

The regression equation model II shows that the adjusted R-square value is 0.106. This explains that the independent variables, namely income smoothing (X1) and CSR disclosure (X2) are able to influence the dependent variable, namely market risk (Y2) of 10.6%, while the remaining 89.4% is influenced by other factors outside of this study.

**Tabel.10 The coefficient of determination (R square) of Equation III Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.185 <sup>a</sup>	.034	.024	205.40771380

a. Predictors: (Constant), CSRDI, PL

b. Dependent Variable: MVE

Source: processed data

The regression equation model III shows that the adjusted R-square value is 0.024. This explains that the independent variables, namely income smoothing (X1) and CSR disclosure (X2) are able to have an influence on the dependent variable, namely the market value (Y3) of 2.4% while the remaining 97.6% is influenced by other factors outside of this study.

#### 4.3.2 Discussion

The results of the H1a hypothesis research prove that the income smoothing variable has a significant negative effect on market response, which is proxied by Cumulative Abnormal Return (CAR). This study proves that the market will provide a negative value to companies that carry out income smoothing actions. So that the higher the company takes income smoothing action, the lower the market reacts. The results of this study support agency theory, according to agency theory, one way that is expected to be in accordance with the principal and agency goals is through a reporting mechanism (Luayyi, 2012). The importance of information regarding earnings is very well recognized by management, so that (behavior) emerges inappropriate attitudes or behaviors carried out by management, namely by smoothing income to overcome various problems that arise between management and various parties who have interests in the company.

The results of this study are in line with research conducted by Dewi *et al.* (2018), Alwiyah and Solihin (2015) Aflatooni and Nikbakht (2009) which prove that income smoothing has a negative effect on Cumulative Abnormal Return (CAR). The results of the study are not in line with research conducted by Setiadi, Purnamasari and Setiany (2015), Indriani and Harnovinsah (2015), Yulianti and Sapta (2016), Fumami and Moghadam (2015), which give results that income smoothing has no effect on cumulative abnormalities. Return (CAR).

The results of the H1b hypothesis research prove that the income smoothing variable has a significant positive effect on market risk, which is proxied by Standard Deviation (SD). The results of this study prove that investors prefer if management reports stable earnings, companies that have a high level of earnings variability are indicated to be prone to bankruptcy risk. The results of this study are in line with research conducted by Suzanti (2001), Pirmaningsih (2003), Martinez and Castro (2011), Iñiguez and Poveda (2004), Putra and Wiwin (2013) showing empirical evidence that the level of risk is lower for companies that practice income smoothing. Information asymmetry between agent and principal in agency theory can be detrimental to both parties. One of the efforts to minimize this agency problem, management is doing income smoothing. Michelson *et al.* (1995) stated that companies that do income smoothing have a significantly lower beta (risk) when compared to companies that do not do income smoothing. The results of this study are not in line with the research conducted by Dewi *et al.* (2018) and Sjafudin Redjab *et al.* (2014) giving different results where these two studies provide results that income smoothing action has no effect on stock market risk. proxies through standard deviation (SD).

The results of the H1c hypothesis research prove that income smoothing has no effect on market value as proxied by Market Value Equity (MVE). The results of this study support research conducted by Ustman, Subekti, and Ghofar (2016), and research by Dewi *et al.* (2018) providing empirical evidence that income smoothing has no effect on market value. The results of this study prove that income smoothing action is not the main factor affecting market value. The results of this study do not support signal theory, management that performs income smoothing is expected to provide a positive signal to the market so that the company's image becomes good in the eyes of investors. The results of this study are not in line with research conducted by Khotimah, Warsini and Nuraeni (2012), Herman and Purwanto (2015) the results of this study prove that earnings management has a positive effect on market value (MVE).

The results of the H2a hypothesis research prove that the CSR disclosure variable (CSRDI) has a positive effect on market response, which is proxied by Cumulative Abnormal Return (CAR). These results prove that the company's CSR disclosure is well responded to by investors as indicated by the value of Cumulative Abnormal Return (CAR). The results of this study are in line with signal theory, based on signaling theory, the disclosure of social activities carried out by companies in the sustainability report provides investors with information about the prospects for substantial future returns. With the disclosure of CSR, investors will give more appreciation for the company. The form of appreciation given by investors can be measured by Abnormal Return (Jogiyanto, 2015). The results of this study are in line with research conducted by Cheng and Christiawan (2011), Carnevale and Mazzuca (2014), Miller and Wikstrom (2016), Ender and Brinckmann (2019), their research results prove that CSR disclosure has a positive effect on CAR. This research is not in line with research conducted by Astuti and Nugrahanti (2015), Maturbongsi and Budiharta (2016), where CAR is not influenced by CSR disclosure.

The results of the H2b hypothesis study prove that the CSR disclosure variable (CSRDI) has a positive effect on market risk, which is proxied by Standard Deviation (SD). The results of this study prove that investors and potential investors have used CSR disclosure information to consider the ups and downs of market risk. Cheng and Christiawan (2011) stated that the disclosure of corporate activities related to CSR can send a positive signal to the market and company stakeholders regarding the prospects for the company's future sustainability. The results of this study are



supported by research conducted by Sun, Salama, Hussainey and Habbash (2010), Jo, Kim and Park, (2016), Lins, Servaes and Tamayo (2017), Haryono and Rusdiah (2015) and Thanaya and Widanaputra (2019); the last research gives the same results where CSR disclosure has a significant effect on firm risk (SD) in mining companies on the Indonesia Stock Exchange. The results of this study are not in line with the research conducted by Tumurin and Kusuma (2003), where CSR disclosure by companies does not affect market risk.

The results of the H2c hypothesis research prove that the CSR disclosure variable (CSRDI) has a positive effect on market value as proxied by Market Value Equity (MVE). The results of this study prove that the higher the disclosure of CSR, the more the company value is increased. Firm value reflects the market value of the company's stock. Kapita and Suardana (2018) state that the better the disclosure of social responsibility in the company will tend to increase the company's reputation. The results of this study are in line with signal theory. Appropriate and appropriate disclosure of CSR is a signal of good news given by the company to the public and shows that the company has good prospects in the future. Research conducted by Nakao et al. (2007), Guenster et al. (2011), Husser and Evraert-Bardinet (2015), Reverte (2016), and Sopian, Mulya and Mulya (2018), show the results that CSR disclosure has a positive effect on market value equity (MVE). The results of this study are not in line with research conducted by Barnett and Salomon (2012), Cho *et al.* (2013), Cahan *et al.* (2016), Riaz *et al.* (2020), their findings show a negative correlation between the market value of companies and the publication of sustainability reports.

## 5. Conclusion and Recommendations

The results showed that the income smoothing variable had a significant negative effect, while the CSR disclosure variable (CSRDI) had a positive effect on market response (CAR). The income smoothing variable has a significant positive effect, while the CSR disclosure variable (CSRDI) has a positive effect on market risk (SD). The income smoothing variable has no effect on market value, while the CSR disclosure variable (CSRDI) has a positive effect on market value (MVE). Further research can carry out a comparative analysis between developed and developing countries on the relevance of income smoothing measures and CSR disclosure, for now the results of this study only imply relevance for companies in Indonesia. Future studies can calculate the abnormal return value within 100 days. Further research can carry out a comparative analysis between developed and developing countries on the relevance of income smoothing measures and CSR disclosure, for now the results of this study only imply relevance for companies in Indonesia.

### 5.1 Managerial implication

This research is for companies in order to reduce income smoothing actions because it has a negative correlation to market reactions and companies can increase CSR disclosure because it will have a positive value for the company. The implication in this research is for companies to reduce the practice of income smoothing, because the research results have a negative correlation with market reactions as measured by cumulative abnormal returns. CSR disclosure by companies is a positive thing that companies must do to increase the company's positive image.

### 5.2 Theoretical implication

This study contributes to the literature on market performance by providing empirical evidence on the effect of income smoothing and CSR disclosure on market performance. This research supports the agency theory and signal theory used. This study is expected to expand the research literature.

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