International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 07, 2020
ISSN: 1475-7192

Do Income Smoothing, Forward-Looking Disclosure, and Corporate Social Responsibility Decrease Information Uncertainty?

Amrie Firmansyah, Andry Irwanto

Abstract--- *This study aims to examine the effect of income smoothing, forward-looking disclosure, and corporate social responsibility on information uncertainty. Information uncertainty is defined as value ambiguity or a level of estimation of a firm's value carried out by investors who have a lot of company information. Investors interpret information as a level of certainty of a company in the future. The method uses quantitative methods. The sample uses 51 manufacturing companies listed on the Indonesian Securities Exchange before January 1, 2009. The result suggests that income smoothing is not associated with information uncertainty. Accounting information provided by the company is not used as a basis for investors in making investment decisions. Furthermore, forward-looking disclosure and corporate social responsibility are negatively associated with information uncertainty. Information disclosed by the company relating to the condition of the company in the future, and investors consider corporate social responsibility as a positive matter.*

Keyword--- *Disclosure, Income Smoothing, Information Uncertainty*

I. Introduction

The financial statements contain information needed by stakeholders, especially for investors. Investor's decision to invest funds in the form of shares in the company is based on the reliability of the company's financial statements. A complete financial report will reduce the asymmetric information that occurs between management and investors. The existence of information asymmetry makes it difficult for investors to differentiate between high-quality and low-quality companies (Wahyuliantini & Suarjaya, 2015). Investors tend to invest their funds in companies that have excellent performance. However, the decline in financial performance in several companies listed on the Indonesia Stock Exchange (IDX) was not accompanied by high volatility of stock returns. In 2016, there were seven manufacturing companies with stable stock returns. Four of them recorded a decrease in profits from 2014 to 2015. Three of the four companies presented income with negative balances. This phenomenon explains that in the prospectus investing, investors in Indonesia are suspected of not paying attention to the financial statements in the previous period.

To reduce fluctuations in the realization of corporate earnings, the management might conduct income smoothing on the company's financial statements (Beidleman, 1973). The manager will increase the reported income when the income realization is low, and on the other hand, will reduce the income reported when the income realization is relatively high. Some literature reveals the reasons for the manager conducting income smoothing for getting incentives in the form of bonuses for fulfilling predetermined targets (Kanagaretnam et al., 2003).

Amrie Firmansyah, Andry Irwanto, Polytechnic of State Finance STAN, Bintaro Main Street 5th Sector, Bintaro Jaya, South Tangerang, Banten, Indonesia, 15222.
E-mail : amrie.firmansyah@gmail.com

Research conducted on the examing of the effect of income smoothing on information uncertainty is still rarely conducted. Chen (2013) found that income smoothing has a negative effect on information uncertainty. Furthermore, Markarian & Gill-de-Albornoz (2010) proved that income smoothing had a negative effect on stock price volatility. Both the results indicate that the income smoothing policy carried out by the company can reduce the asymmetric information that occurs between the company and investors. It will ultimately have an impact on the uncertainty faced by investors in forecasting the condition of a company in the future.

Instead of conducting income smoothing, another way management can reduce asymmetric information is by disclosing forward-looking information (Mathuva, 2012). Forward-looking disclosure is an important variable to be discussed because of several things. Firstly, the forward-looking disclosure is an essential topic in corporate disclosure because of the capability of the forward-looking disclosure in the delivery of relevant and valuable information to external users (Amir and Lev 1996). Secondly, the forward-looking disclosure is included in the most popular framework for corporate disclosure (Beretta & Bozzolan, 2008).

Bravo (2016) examined the effect of forward-looking disclosure on information uncertainty. The study suggested that forward-looking disclosure had a negative effect on information uncertainty. It is concluded that more forward-looking information is disclosed, investors will reduce more information uncertainty. Research conducted by Bozzolan et al. (2009) also had the same results; if the company does forward-looking disclosure, it will reduce the dispersion of earnings forecasting. Both of these research results indicate that the management's ability to predict the conditions of his company in the future can influence investors' investment decisions. This condition causes that investors are expected to increase trust companies that have business sustainability in the future, as reflected in the disclosure of forward-looking information.

However, Darmadi (2013) found that the level of voluntary information disclosure in Indonesia is still in a low position. The statement shows that company management in Indonesia does not understand the importance of voluntary disclosure information, including forward-looking disclosure information, considering that forward-looking disclosure information is part of the voluntary disclosure. To reduce the asymmetric information that occurs between management and shareholders, another way that can be conducted by management is to disclose the activities of corporate social responsibility (CSR) (Agusti & Rahman, 2011). The CSR activities disclosure reflects that the information obtained by interested parties becomes more transparent, especially for investors. It will ultimately make it easier for investors to assess company performance.

Harjoto & Jo (2015) examined the effect of CSR disclosures on information uncertainty. The study was conducted in the United States, with a sample of 2,034 companies. The study proved that CSR disclosure negatively affects information uncertainty. Harjoto et al. (2017) also examined the effect of CSR disclosures on information uncertainty. The results of the study also proved the same thing, namely that disclosure of corporate social responsibility reduces information uncertainty. The research shows that investors increasingly like companies that increasingly have social and environmental responsibility. CSR activities in Indonesia have been regulated through legislation. According to Act No. 40 of 2007 concerning Incorporated Company, it is stated that a company that carries out its business activities in the field and is related to natural resources must carry out social and environmental responsibilities. In other countries, if a company does not carry out CSR activities, it is not a problem because the company has fulfilled the obligation to pay taxes to the state (KH et al., 2016). Based on research conducted by Harjoto & Jo (2015), Harjoto et al. (2017), and Mishra & Modi (2013) suggested that if the company disclosed the CSR activities, it would reduce information uncertainty.

Jensen & Meckling (1976) defined agency relations as an agreement between owner and management. One or more people acting as owners (principals) assign other people as management (agents) in the framework of providing services. The assignment was accompanied by the delegation of authority for decision making to management. If both parties want maximum profit, it can be concluded that management will not act in the same interests as the owner hopes. It is due to differences in interests between owners and management. The existence of these different interests is known as the agency problem.

Agency theory is a theory that focuses on solving two problems that occur in the agency relationship (Eisenhardt, 1989). The first agency problem occurs when the interests or objectives between the owner and management are different. These differences in interests will cause difficulties or expensive costs that must be incurred by the owner to verify the activities carried out by management. The second problem is the problem of risk sharing that occurs when there are differences in risk-related behavior between owner and management. These problems are due to differences in preferences for the risks faced.

Management tends to avoid risk to maintain its position. However, the owner expects a significant risk so that the rate of return received at a large portion also. The owner, in this case, the investor, needs information as a basis for making decisions on his investment. However, the amount of information that management has is different from the amount of information that investors have. Stiglitz (2002) stated that asymmetric information is caused by differences in information known to different people so that asymmetric information arises between the person who has the information and the person who can make a better decision. Scott (2015) divided information asymmetry into two categories, namely, adverse selection and moral hazard. Adverse selection occurs when managers and parties within the company have more information regarding the circumstances and prospects of the company than outside parties, and there may be facts that are not conveyed to the owner. Moral hazard is an activity carried out by a manager that is not entirely known to investors, namely both shareholders and creditors so that managers can take actions that violate contracts that are generally not or not feasible to do.

Agency problems occur when the information held by the owner is different from the information held by management, resulting in information asymmetry between the two parties. Management has more information than information obtained by the owner. Management tries to only present information that shows the company's financial condition looks good so that the information submitted is only positive. Information that is negative as much as possible is not disclosed by management in the company's financial statements so that investors can retain shares in the company. The detention of negative information aims to attract new investors.

On the other hand, investors hope that the information presented by the company is complete so that the information uncertainty experienced by investors can be reduced. Regarding information uncertainty, information asymmetry causes information received by investors to differ from the information held by management. Information received by investors is presented in the form of sustainability reports, financial statements, and annual reports. The more information that is presented, the smaller the information asymmetry occurs. Furthermore, this causes investors to receive increasingly clear information so that information uncertainty can be reduced.

Various studies have been conducted related to income smoothing. One of them is a study conducted by Chen (2013). The study examined the effect of income smoothing on information uncertainty, stock returns, and the cost of equity. Income smoothing in the study was measured using two measurement scales, namely total accruals and discretionary accruals. The study suggested that an increase in income smoothing through total accruals, or through discretionary accruals, tends to reduce the uncertainty of information and the cost of equity of a company. It suggests that income smoothing has a negative effect on information uncertainty. Other research related to income smoothing is research conducted by Markarian & Gill-de-Albornoz (2010) which examines the effect of income smoothing on stock price volatility. The study suggested that income smoothing has a negative effect on stock price volatility. It proves that the income smoothing practices by the company aim to reduce the stock price volatility.

Research examining the effect of future-oriented disclosures on information uncertainty is found in limited quantities. Bravo (2016) examined the effect of future-oriented disclosure on information uncertainty with a corporate reputation variable as a moderating factor. The study was conducted in just one year because it was assumed that future-oriented disclosures were expected to be constant over time. Future-oriented disclosures in research conducted by Bravo (2016) using content analysis techniques. Future-oriented disclosure measurement index refers to research conducted by Aljifri & Hussainey (2007). The results of this study indicate that in companies with a high reputation, future-oriented disclosures have a negative effect on information uncertainty. Other research related to future-oriented disclosure is conducted by Bozzolanet al. (2009). The study employed companies originating from the European continent (Italy, Germany, France, and Switzerland). The study suggested that increasing the disclosure of future-oriented information by a company will increase forecasting accuracy and reduce the dispersion of forecasting earnings (forecast accuracy).

Research related to the corporate social responsibility disclosure has also been carried out as well as research related to income smoothing. Harjoto & Jo (2015) analyzed the effect of disclosure of overall corporate social responsibility, legal corporate social responsibility and normative corporate social responsibility on the dispersion of earnings forecasting (analyst dispersion of earnings forecast), volatility of stock returns (volatility of stock return), cost of capital (cost of capital), and firm value (firm value). The study suggests that the intensity of corporate social responsibility disclosure as a whole will reduce the dispersion of earnings forecasting, stock returns volatility, and capital costs, but on the other hand, it can increase the value of the company. However, when corporate social responsibility is classified as legal corporate social responsibility and normative corporate social responsibility, the results of research on the two classifications of corporate social responsibility are contradictory. The greater disclosure of legal corporate social responsibility will reduce the dispersion of earnings forecasting, stock return volatility, and the cost of capital but will increase the value of the company. On the other hand, the greater disclosure of normative corporate social responsibility will also increase the dispersion of earnings forecasting, stock returns volatility, and the cost of capital but will reduce the value of the company.

Mishra & Modi (2013) examined the effect of corporate social responsibility disclosure on unsystematic risk. Mishra & Modi (2013) divided corporate social responsibility into two categories, namely positive corporate social responsibility and negative corporate social responsibility. The division of corporate social responsibility is based on the corporate social responsibility index published by Kinder, Lydenberg, and Domini Research and Analytics Inc. (KLD). According to KLD, corporate social responsibility is divided into seven dimensions, with each dimension grouped into strengths and concerns. Research conducted by Mishra & Modi (2013), included the category of strength into affirmative corporate social responsibility. The study suggested that the disclosure of corporate social responsibility has a significant effect on unsystematic risk. In detail, it is mentioned that the disclosure of corporate social responsibility positively negatively impacts unsystematic risk.

Conversely, disclosure of negative corporate social responsibility has a positive effect on unsystematic risk. It proved that investors consider corporate social responsibility as information that can reduce the uncertainty faced by these investors in assessing the company that they will invest in the future. The next research that examines the effect of corporate social responsibility on information uncertainty is research conducted by Harjoto et al. (2017). The study suggests that disclosure of corporate social responsibility is negatively associated with corporate risk.

This study is essential to do because the investment decisions made by investors are based on the certainty of available information. Information certainty is one of them reflected in the company's performance in the financial statements and published annual reports. This study uses three variables that relate to management's actions in the company. These actions are reflected in income smoothing, forward-looking disclosure, and corporate social responsibility. Therefore, this study examines income smoothing, forward-looking disclosure, and corporate social responsibility on information uncertainty using Indonesia data. Previous research was only carried out in developed countries. This research can be applied in Indonesia as a developing country, considering that those involved in stock trading in both developed and developing countries have similarities. Both of them involve investors and companies. Also, reports issued to developing countries and developed countries are not much different especially for financial reports and annual reports.

Regarding agency theory, management interests differ from those of investors. The manager might take actions that will benefit the manager. According to the moral hazard theory, managers can take actions that are not known to investors even if they are not feasible. One of the actions taken by the manager so that the company's performance looks good is by conducting income smoothing. Chen (2013) examined the effect of income smoothing on information uncertainty. Income smoothing in that study is divided into total accruals and discretionary accruals. The study suggests that both on total accruals and on accruals, the effect of discretion on information uncertainty is negative. The results of this study are also supported by research conducted by Markarian & Gill-de-Albornoz (2010), which stated that income smoothing has a negative effect on stock price volatility. Both of the results of this study indicate that investors perceive the income smoothing done by the company can reduce the uncertainty faced in assessing the condition of the company in the future.

Based on the efficient contract approach, the manager's income smoothing is intended to protect the parties contained in the contract. In this study, income smoothing by managers is an action taken by managers to protect the interests of shareholders. Income smoothing is believed to make investors believe the sustainability of a company's business. It might reduce the information uncertainty received by investors on the company. Based on the description, the first hypothesis in this study is as follows.

H_1: income smoothing is negatively associated with information uncertainty

Agency theory states that when the information possessed by the principal is different from the information held by the agent, it will lead to asymmetric information between the two parties. Asymmetric information that occurs will make it difficult for investors to know the company's financial condition in the future. Investors expect the condition of a company based on reports issued by the company, such as annual reports and financial statements. To reduce the asymmetry of this information, the company tries to disclose an adequate number of company conditions. One way is to reveal forward-looking information.

The research conducted by Bravo (2016) succeeded in proving that more and more forward-looking disclosure will reduce the volatility of stock returns. This statement is supported by the results of research conducted by Bozzolan et al. (2009). The study also proved that more forward-looking disclosure information could reduce the dispersion of earnings forecasting. In line with agency theory, forward-looking disclosure can reduce the asymmetric information that occurs and can improve the decision-making process undertaken by investors. Publication of forward-looking disclosures can help investors predict the condition of a company in the future. It is assumed to reduce the information gap between companies and investors. From a management perspective, forward-looking disclosure can reduce uncertainty over a company and is a way of mitigating asymmetric information. In this study, more forward-looking disclosure resulted in a reduction in information uncertainty. Based on this explanation, the second hypothesis in this study is as follows:

H_2: forward-looking disclosure is negatively associated with information uncertainty

Related to agency theory, the agent attempts to only present information that shows the company's financial condition is seen in good condition. On the contrary, according to the adverse selection theory, asymmetric information occurs when managers have more information regarding the circumstances and prospects of the company than outside parties so that there is a possibility of facts that are not conveyed by the principal. This information asymmetry can be reduced by disclosing corporate social responsibility activities.

Harjoto & Jo (2015) conducted a study on the effect of disclosing corporate social responsibility for information uncertainty. The study suggests that with the increasing number of corporate social responsibility disclosed by the company, it will further reduce the dispersion of earnings forecasting and stock returns volatility. Harjoto et al. (2017) conducted a similar study with similar results, namely that disclosure of corporate social responsibility negatively affects the volatility of stock returns. Corporate social responsibility is information disclosed by the company to show that the company has social responsibility so that the more activities carried out, will reduce information uncertainty. The disclosure of more corporate social responsibility can convince investors that the company cares about the environment. In this study, the disclosure of social responsibility by the company is a form of asymmetric information reduction so that investors will get more information on the financial statements. It will cause information uncertainty received by investors to diminish.

H_3: corporate social responsibility disclosure is negatively associated with information uncertainty.

II. RESEARCH METHODOLOGY

This research uses the quantitative method. The population in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX). Manufacturing companies were chosen for this study because they are the most dominant sector in the Indonesia Stock Exchange. Sampling conducted in this study using a purposive sampling method. Data that must be obtained in this study, namely information uncertainty whose data usage is based on the formula t + 1 using financial report data for the period 2014 to 2016, income smoothing uses data in the financial statements for the period 2009 to 2015, forward-looking disclosure uses annual reports in the 2013 to 2015 period, and corporate social responsibility disclosure used annual reports and business sustainability reports in the period 2013 to 2015.

A secondary source in this study derives from annual reports, which also include the financial statements of companies that have been listed on the IDX from 2009 up to 2016. These secondary data can be obtained from www.idx.co.id, as well as from other sources that are considered appropriate for the research conducted. The sample selection in this study is based on manufacturing companies listed on the IDX as of December 31, 2016, except register after January 1, 2009, present currencies other than rupiah, publish annual reports only in Indonesian, do not have stock sale transactions in one year, have equity book value with a negative balance.

This study employs income smoothing, forward-looking disclosure, and corporate social responsibility as independent variables. Income smoothing in this study is measured by a negative correlation between changes in discretionary accruals

(APDAP) and changes in prediscretionary income (DPDI). Income smoothing, according to Kothari et al. (2005), Tucker & Zarowin (2006) as well as Firmansyah (2017) using the performance-adjusted accruals of the following models:

$$\text{Accruals} = a\left(\frac{1}{TAt-1}\right) + b\left(\frac{\Delta Salest}{TAt-1}\right) + c\left(\frac{PPEt}{TAt-1}\right) + dROAt + \varepsilon t \qquad (1)$$

Accruals are calculated from net income minus cash flow from operations in year t divided by total assets in year t-1. Changes in sales (Sales) and PPE (Property, Plant, and Equipment) net are scaled using total assets at the beginning of the year. ROA (Return on Asset) is a performance-adjusting control variable. Nondiscretionary accrual (NDAP) is a fitted value of the regression in the equation above, and discretionary accrual (DAP) is the deviation of the actual accruals in NDAP. Prediscretionary income (PDI) is calculated from net income minus discretionary accruals (PDI = NI - DAP).

Forward-looking disclosure measurement using index refers to research conducted by Aljifri & Hussainey (2007).

$$FLD = TFL / MD \qquad (2)$$

Where:

FLD = Total forward-looking disclosure score

TFL = Total forward-looking disclosure

MD = Maximum disclosure for each company

Furthermore, the measurement of corporate social responsibility in this study refers to the G-4 Global Reporting Initiative (GRI). CSR is constructed by dividing the disclosure CSR with the maximum value of CSR (Harjoto & Jo, 2015).

$$CSR_{i,j} = \frac{\sum X_{i,j}}{n_j} \qquad (3)$$

Where:

$CSR_{i,j}$: Disclosure index of corporate social responsibility j

n_j : the number of disclosure items of *corporate social responsibility* for the company j, nj ≤ 91

$\Sigma X_{i,j}$: Total item disclosed: 1 = if item i disclosed; 0 = if the item i not disclosed

Dependent variable

The dependent variable in this study is information uncertainty. Information uncertainty uses stock return volatility proxies, such as research conducted by Zhang (2006). Stock return volatility = annual return volatility using observations of daily returns next year

$$Sp_{i,t+1} = \sqrt{\frac{\sum_{t=1}^{n} (P_{i,t+1,j} - P_{i,t+1})^2}{n-1}} \qquad (4)$$

$$P_{i,t+1} = \frac{1}{n}\sum_{t=1}^{n} x_{i,\,t+1,\,j} \qquad (5)$$

Where:

$Sp_{i,\,t+1}$ = Standard deviation of stock returns i in year t+1

$P_{i,t+1}$ = average return of shares i in year t+1

n = number of trading days in one year

$P_{i,t+1,j}$ = return of shares i on day j in year t+1

This study also employs company size, leverage, and book to market ratio as control variables. Company size is formulated as a natural log of total assets (Harjoto & Jo, 2015; Harjoto et al., 2017; Mishra & Modi, 2013). Meanwhile the leverage ratio is a comparison between long-term debt and total assets (Chen, 2013; Markarian & Gill-de-Albornoz, 2010). Meanwhile, the book-to-market equity ratio is a calculated book value of equity divided by stock market value at the et end of the fiscal year (Chen, 2013).

III. Result And Discussion

Based on the established criteria, the total observations obtained are 153 firms-years. The results of the sample selection are shown in table 1.

Table 1

Research Sample

No	Criteria	Amount	Measurement
1	Manufacturing companies listed on the ISE as of December 31, 2016	144	Firms
2	Companies listing after January 1, 2009	(31)	Firms
3	Companies that present currencies other than rupiah	(22)	Firms
4	The companies publish annual reports only in Indonesian	(14)	Firms
5	Companies with data on stock sale transactions that were not obtained	(10)	Firms
6	The company that do not have stock sale transaction data in one year	(1)	Firms
7	The company with a standard deviation of the data of the stock sale transaction that is zero	(1)	Firms
8	Companie with an equity book value with a negative balance	(2)	Firms
9	*Outlier data*	(11)	Firms
Total sample		51	Firms
Years		3	Years
Total Observation		153	Firm-Year

Source: Processed from various sources

The results of descriptive statistics suggest that the average income smoothing is 0.802792. The value of income smoothing, which is increasingly away from the value one indicates that the company is increasingly not doing income smoothing. The results of this study indicate that more than half of the manufacturing companies in this research conduct income smoothing. Different results are obtained from forward-looking disclosure and corporate social responsibility variables. The average obtained is less than half, which shows that the items disclosed by the companies are not more than half of the forward-looking disclosure and corporate social responsibility index items. Descriptive statistics are shown in table 2.

Tabel 2 Descriptive Statistics

Variabel	Rata-rata	Median	Maksimum	Minimum	Std. Dev.
IU	0,030138	0,024696	0,568395	0,001797	0,045202
IS	0,802792	0,948926	0,999979	-0,974031	0,382467
FLD	0,320635	0,314286	0,571429	0,085714	0,120071
CSR	0,180205	0,164835	0,483516	0,076923	0,081490
SZE	28,35599	28,16177	33,13405	25,61948	1,631352
LEV	0,131902	0,068700	0,735868	0,006276	0,130258

BMR	1,092202	0,832343	4,897664	0,017100	0,998787

There are three estimations of regression models in research using data panels, namely the common effect model (CEM), a fixed-effect model (FEM), and random effect models (REM). The selection of the panel data regression model is best determined by conducting a series of tests. Testing of the model is the chow, Hausman, Lagrange multiplier tests. Table 3 summarizes the results of the tests. Based on the results of the three tests that have been carried out, the most appropriate model used in this study is the fixed effect model (FEM).

Table 3

Test Results for Panel Data Regression Models

No	Test	*Common Effect*	*Fixed Effect*	*Random Effect*
1	Chow Test		V	
2	Hausman Test		V	
3	Uji Lagrange multiplier	V		
Chosen Model			V	

Furthermore, the result of the panel data regression test is as follows:

Table 6

The Summary of the Regression Results

Variable	Sign	Koefisien	t-Statistik	Prob.		Hypothesis
IS	-	0.005223	1.986109	0.02495	**	Not Supported
FLD	-	-0.057779	-3.880568	0.00010	***	Supported
CSR	-	-0.045612	-1.989006	0.02475	**	Supported
SZE		0.014861	2.883083	0.00245	***	
LEV		0.067882	4.309025	0.00000	***	
BMR		0.015080	7.369438	0.00000	***	
R^2	0.855288					
Adj. R^2	0.770873					
F-stat.	10,13190					
Prob(F-stat.)	0,000000					

Source: E-views output 9th version

Discussion of the association between income smoothing and information uncertainty

Hypothesis testing suggests that income smoothing is not associated with information uncertainty. This result is different from Chen (2013) and Markarian & Gill-de-Albornoz (2010). Both studies proved that income smoothing is negatively associated with information uncertainty. This study indicates that some investors still do not understand accounting information, so the investor does not consider the information for investment decision-making. It is relevant to Aprillianto et al. (2014) who found that the existence of financial statements as a provider of information that is beneficial to investors is not entirely directly proportional to the investor thoughts. Although accounting information is essential information in investment decisions, it turns out that investors do not fully use the information. Some investors tend not to understand the accounting information presented by the company.

Investors usually seek company information before deciding to invest their funds in the company or not (Yonatan et al., 2016). The financial statements presented by the company contain information needed for shareholders, especially for investors. This information is in the form of the financial position and financial performance of a company. The income smoothing action taken by the management of a company is reflected in the company's financial statements. This action aims to make the company's finances appear in good condition so that investors' decisions are affected by the company's financial statements that look good. However, in this study, the financial statements proved unable to influence investors' investment decisions. Septyanto & Adhikara (2013) found that the benefits of financial information did not affect investment intentions. According to the study, financial statements are not useful in determining stock investment decisions. Financial information does not provide benefits to investors regarding the benefits they can get in investing their funds. In this case, investors have other considerations in their investment decisions, including capital gains, other people's views, and personal attitudes.

Discussion on the Effect of Forward-Looking Disclosure on Information Uncertainty

The hypothesis testing suggests that forward-looking disclosure is negatively associated with information uncertainty. This result is in line with Bravo (2016) and Bozzolan et al. (2009). Asymmetric information arising from the relationship of principal and agents between management and investors can be overcome through sufficient disclosure. Sihombing et al. (2017) stated that the adequacy and quality of the information received by investors could influence investor behavior. The more relevant information that is disclosed, the more it will increase investor confidence and interest in the company's shares.

Furthermore, Sihombing et al. (2017) stated that with the increasing amount of information disclosed, it would reduce the information asymmetry that occurs so that it will also result in a reduction in company information uncertainty. The lower information asymmetry will benefit the principal and prospective investors because the information used is getting better. In essence, investors need accounting information provided by the company as a basis for analysis in making investment decisions. The complete, accurate and timely information allows investors to make rational decisions so that the results can be as expected by the investor.

Discussion of the Effect of Corporate Social Responsibility Disclosure on Information Uncertainty

The hypothesis testing suggests that corporate social responsibility disclosure is negatively associated with information uncertainty. It is relevant to Harjoto & Jo (2015) and Harjoto et al. (2017), who also found that corporate social responsibility disclosure has a negative effect on information uncertainty. Mishra & Modi (2013) found similar evidence, namely that real corporate social responsibility has a negative effect on unsystematic risk. In this study, the average disclosure of corporate

social responsibility in Indonesia continues to increase. It proves that companies in Indonesia are increasingly concerned about corporate social responsibility activities. Also, the actions of corporate social responsibility are considered as the company's strategy in building its reputation. This study also proves that investors currently base their investment decisions, one of which is on corporate social responsibility activities conducted by the company. Maharani (2011) stated that the investor paradigm in assessing companies has begun to shift. Initially, the assessment was only based on an analysis of liquidity and profitability capabilities, but now also covers corporate responsibility in developing policies related to ethical sustainability and corporate sustainability. Investors currently no longer base their investment decisions only on company profits, but also on the company's concern for society and nature.

Corporate social responsibility activities carried out by the company form a positive perception for investors. This statement is supported by research conducted by Muhadjir & Qurani (2011), which states that consumers consider corporate social responsibility as something that forms a positive perception that can also reflect a better corporate image. Not only consumers who respond positively to corporate social responsibility actions by the company. Investors also appreciate the corporate social responsibility activities carried out by the company. Also, investors not only see the company's profit as the only basis for making investment decisions. Corporate social responsibility information is disclosed in the annual report and sustainability report so that this shows that investors prefer companies that have responsibility for the environment.

IV. Conclusions

Income smoothing is not associated with information uncertainty. It suggests that information uncertainty received by investors is not affected by income smoothing. Even though management manipulates the company's profits, investors are suspected not to regard the information as relevant and useful information in making investment decisions in the future. Forward-looking disclosure is negatively associated with information uncertainty. Information disclosed by management can reduce information asymmetry that occurs between management and investors. Investors then interpret the information as information that can convince them that the company to be invested has business sustainability in the future. Corporate social responsibility disclosure is negatively associated with information uncertainty. The increasing number of corporate social responsibility activities disclosed by the company makes investors increasingly understand that the company is not only concerned with its profits but also pay attention to the economic, social and environmental conditions in its surroundings.

This study still has limitations related to the content analysis method in the assessment of forward-looking disclosure and corporate social responsibility disclosures because it was conducted manually. This method can lead to accidental errors or also human errors. Besides, the element of subjectivity in assessing forward-looking disclosure and corporate social responsibility disclosures is a limitation of the research. The different understanding of different indicator concepts in each study can provide different values for forward-looking disclosure and corporate social responsibility.

This study has a three-year interval, from 2013 to 2015. Future research is recommended to be able to extend longer time intervals so that the results of the research can be more accurate. Forward-looking disclosure and corporate social responsibility variables in this study were calculated using the content analysis method. Content analysis methods can be done either manually or computerized. This research was conducted using a manual method. Subsequent research is recommended to use a computerized method to measure the value of forward-looking disclosure and corporate social responsibility variables. It is supported by the reason that content analysis using computerization, in addition to saving energy, can also save costs and time.

For practical implication, investors should consider the information of a company that they obtain as a basis for investing their funds. Information uncertainty is a level of uncertainty faced by investors in predicting the value of a company in the future. This uncertainty can be reduced by adding information received from the company. The more information received, the more information asymmetry will occur between management and investors. The results of this study are expected to be a consideration of investors in estimating the investment that will be invested in a company in the future. The results of this study are also expected to be additional information for investors in determining the factors that influence the information uncertainty they receive.

Secondly, the Indonesia Financial Services Authority (FSA) can consider issuing a more comprehensive index of corporate social responsibility disclosures. It is intended to ensure uniformity of corporate social responsibility disclosure by companies listed on the Indonesia Stock Exchange. The disclosure index can adopt an index of corporate social responsibility disclosures issued by the Global Reporting Initiative (GRI). Corporate social responsibility activities are presented in the company's annual report.

Thirdly, according to agency theory, management acts as an agent, while investors are principals. If both parties have different interests, agency problems will arise. Management can, of course, provide information that is only of good value to the company, without considering the effectiveness of the information. What needs to be considered is the usefulness of this information for investors. The results of this study can be a consideration for management in taking actions that are in line with the wishes of investors. Factors that can reduce information uncertainty of a company can be an indicator for management in submitting financial reports, annual reports, and sustainability reports for the public. Based on the results of the study, companies are advised to disclose more forward-looking and corporate social responsibility information. The results of this study indicate that the more forward-looking and corporate social responsibility information disclosed by the company, the more uncertain information received by investors will be reduced.

REFERENCES

[1] Agusti, R. R., & Rahman, A. F. (2011). Relevansi informasi akuntansi: peran pengungkapan corporate social responsibility dan dewan komisaris independen. *JAAI*, 15(2), 121-129.

[2] Amir, E., & Lev, B. (1996). Value relevance of non-financial information: the wireless communication industry. *Journal of Accounting and Economics*, 22(1-3), 3-30.

[3] Aljifri, K., & Hussainey, K. (2007). The determinants of forward-looking information in annual reports of UAE companies. *Managerial Auditing Journal*, 22(9), 881-894.

[4] Aprillianto, B., Wulandari, N., & Kurrohman, T. (2014). Perilaku investor saham individual dalam pengambilan keputusan investasi: studi hermeneutika-kritis. *e-Journal Ekonomi Bisnis dan Akuntansi*, 2014, 1(1), 16-31.

[5] Beidleman, C. R. (1973). Income smoothing: The role of management. *The Accounting Review*, 48(4), 653-667.

[6] Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: The case of forward-looking disclosure. *Journal of Accounting, Auditing, and Finance*, 23(3), 333-376.

[7] Bozzolan, S., Trombetta, M., & Beretta, S. (2009). Forward-looking disclosures, financial verifiability, and analysts forecasts: a study of cross-listed European firms. *European Accounting Review*, 18(3), 435-473.

[8] Bravo, F. (2016). Forward-looking disclosure and corporate reputation as mechanisms to reduce stock return volatility. *Revista de Contabilidad – Spanish Accounting Review*, 19(1), 122-131.

[9] Chen, L. H. (2013). Income smoothing, information uncertainty, stock returns, and cost of equity. *Review of Pacific Basin Financial Markets and Policies*, 16(3), 1-34.

[10] Darmadi, S. (2013). Corporate governance disclosure in the annual report: An exploratory study on Indonesian Islamic banks. *Humanomics*, 29(1), 4-23.

[11] Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.

[12] Firmansyah, A. (2017). Pengaruh income smoothing dan real earning management terhadap keinformatifan laba. *Jurnal Online Insan Akuntan*, 2(2), 175-188.

[13] Global Reporting Initiative. (2013). *Prinsip-prinsip Pelaporan dan Pengungkapan Standar*. Netherland: Global Reporting Initiative.

[14] Harjoto, M., & Jo, H. (2015). Legal vs. normative CSR: Differential impact on analyst dispersion, stock return volatility, cost of capital, and firm value. *Journal of Business Ethics*, 128(1), 1-20.

[15] Harjoto, M., Jo, H., & Kim, Y. (2017). Is institutional ownership related to corporate social responsibility? The nonlinear relation and its implication for stock return volatility. *Journal of Business Ethics*, 146(1), 77-109.

[16] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

[17] Kanagaretnam, K., Lobo, G. J., & Mathieu, R. (2003). Managerial incentives for income smoothing through bank loan loss provisions. *Review of Quantitative Finance and Accounting*, 20(1), 63-80.

[18] Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197.

[19] Maharani, S. N. (2011). Corporate sustainability report sebagai indikator pengambilan keputusan investasi. *Jurnal Keuangan dan Perbankan*, 15(2), 191-200.

[20] Markarian, G., Gill-de-Albornoz, B. (2010). Income smoothing and idiosyncratic volatility. *AAA 2010 Financial Accounting and Reporting Section (FARS) Paper*, 1-58.

[21] Mathuva, D. (2012). The determinants of forward-looking disclosures in interim reports for non-financial firms: Evidence from a developing country. *International Journal of Accounting and Financial Reporting*, 2(2), 125-141.

[22] Mishra, S., & Modi, S. B. (2013). Positive and negative corporate social responsibility, financial leverage, and idiosyncratic risk. *Journal of Business Ethics*, 117(2), 431-448.

[23] Muhadjir, & Qurani, G. F. (2011). Pengaruh penerapan corporate social responsibility terhadap persepsi

nasabah bank dan dampaknya terhadap corporate image. *Journal The Winners*, 12(2), 180-195.
[24] Scott, W. R. (2015). *Financial Accounting Theory, 7th edition*. Toronto: Pearson Canada Inc.
[25] Septyanto, D., & Adhikara, M. F. A. (2013). Perilaku investor individu dalam pengambilan keputusan investasi sekuritas di Bursa Efek Indonesia (BEI). *Sustainable Competitive Advantage*, 3(1).
[26] Sihombing, J., Agoes, S., & Santoso, U. (2017). Studi empiris terkait dengan pengungkapan sukarela, kualitas audit dan asimetri informasi terhadap stock return pada perusahaan manufaktur yang terdaftar pada Bursa Efek Indonesia. *Jurnal Akuntansi*, 21(1), 1-20
[27] Stiglitz, J. E. (2002). Information and the change in the paradigm in economics. *The American Economic Review,* 92(3), 460-501.
[28] Tucker, J. W., & Zarowin, P. A. (2006). Does income smoothing improve earnings informativeness? *The Accounting Review*, 81(1), 251-270.
[29] Wahyuliantini, N. M. & Suarjaya, A. A. G. (2015). Pengaruh harga saham, volume perdagangan saham, dan volatilitas return saham pada bid-ask spread. *Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, 9(2), 146-155.
[30] Yonatan, C. B., Kasim, M. Y., & Bidin, C. R. K. (2017). Pengaruh pengumuman dividen terhadap harga saham dan abnormal return pada industry jasa di bursa efek Indonesia. *Jurnal Ilmu Manajemen Universitas Tadulako*, 3(1), 233-243.
[31] Zhang, X. F. (2006). Information uncertainty and stock returns. *The Journal of Finance*, 61(1), 105-137.