

The Effect Of Disclosure CSR GRI-On Market Reaction In Listed Energy Based Companies In Indonesia

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Abstract

This study aims to analyze of the implementation Corporate Social Responsibility (CSR) disclosure on market reaction to energy companies listed on the Indonesia Stock Exchange. The development of previous research, and the effective implementation of the Global Reporting Initiative that uses the 2016 GRI standard which was approved in 2016 by the Global Sustainability Standards Board (GASB) which then effectively applies starting July 1, 2018. The result, GRI standard CSR disclosure has no effect on the market reaction of energy companies listed on the Indonesia Stock Exchange. In the results of this study the possibility of stakeholders other than investors still assume that CSR carried out by the company is oriented to long-term company performance, while the thinking as an investor or potential investor is only about how to optimize short-term company performance.

INTRODUCTION

The current phenomenon seen from the mindset corporate that only focuses on profit oriented is questioned in harmony with the occurrence of various environmental and social damage that is is a result of the company's activities to be able to get high profits. In carrying out business activities, each company focuses on the profit that will be generated. But as the development of the business world, the company does not only focus on the profits that will be generated. Companies are required to pay more attention to the environmental and social responsibilities around the company. Major cases of environmental pollution in Indonesia such as Lapindo Mudflow in Sidoarjo, Freeport in Papua, and what happened in Teluk Bayat made company owners and communities aware that social and environmental responsibility was important (Hari, 2016).

The loss experienced by the community in this phenomenon in terms of economic, social and cultural terms. The loss that occurred in terms of the economy itself is that the economy of the surrounding community is totally

paralyzed. Not only that, the psychological burden experienced by the victims, disrupted health due to hot mud emitting the smell of poisonous gas and settlement of compensation to the community around the company has not been completed.

At present, sustainable development is a necessity. The Guidelines Global Reporting Initiative explain the purpose of sustainable development to meet the needs of today's young generation without having to reduce the ability of future generations to meet their needs (Astuti & Nugrahanti, 2015; GRI, 2016). Thus, companies are now required to carry out their business activities ethically in environmental and social matters so that in conducting business activities not only think about what is happening now, but also think about the future. A sustainability report is a report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities. The Sustainability Report is now a trend and need for companies that are changing to inform social, economic and environmental performance to all stakeholders of the company (GRI, 2016).

Sustainability reports based on GRI Standards can be used to measure organizational performance in relation to laws, codes, norms, performance standards and voluntary initiatives showing an organization's commitment to sustainable development and to compare organizational performance over time. GRI also promotes and develops a standardized approach to reporting to stimulate demand for sustainability information - which will benefit reporting organizations and those who use the same report information.

This study analyzes the application of GRI-standard CSR disclosures to market reactions in energy companies in Indonesia. The results of previous studies are quite diverse. CSR research on this research develops previous research that has been done (Astuti & Nugrahanti, 2015). Previous studies have found that there is no positive effect on the disclosure of Corporate Social Responsibility (CSR) on abnormal returns. Test results on the unexpected trading volume give the result that there is no influence on the disclosure of Corporate Social Responsibility (CSR) on the unexpected trading volume.

This research is different from previous studies. First, in previous studies not using GRI still at the 4th Generation level (unsettled), in this study using the GRI standard which was approved in 2016 by the Global Sustainability Standards Board (GASB) which then took effect effectively starting July 1, 2018. Second, the 2016-2019 election period was chosen so that the use of the 2016 GRI will be reflected in the annual report of the energy companies in 2016-2019. Third, the selection of research samples in energy companies is a company included in the category of companies high-profile. High-profile are companies which were highlighted by the public on the action taken on the environment (Hackston & Milne, 1996; Roberts, 1992; Zuhroh & Sukmawati, 2003). Finally, the formulation of the problem in this study is how the influence of the adoption of disclosures Corporate Social Responsibility GRI standards to the market reaction on energy companies listed on the Indonesia Stock Exchange. Based on previous

research conducted (Flammer, 2013; Yen & André, 2019) that there is an influence of CSR disclosure of Corporate Social Responsibility to the market reaction. Based on the theory and previous research that supports it, then the hypothesis proposed in this study are the effect of the application of the disclosure of Corporate Social Responsibility GRI standards on the market reaction to the energy company listed on the Indonesia Stock Exchange.

Yen & André (2019) conducted a study on CSR on market reactions in merged and acquired companies. Market reaction in this study was measured using cumulative abnormal returns (CARs). Meanwhile, to measure CSR by using 226 key performance indicators (Key Performance Indicators) taken from the TRCRR database. The results of the study concluded that there was a positive market reaction to CSR conducted by companies conducted in 23 countries with research samples from 2008 to 2014.

Based on previous research conducted (Flammer, 2013; Yen & André, 2019) that there is an influence of CSR disclosure of Corporate Social Responsibility to the market reaction. Based on the theory and previous research that supports it, then the hypothesis proposed in this study are the effect of the application of the disclosure of Corporate Social Responsibility GRI standards on the market reaction to the energy company listed on the Indonesia Stock Exchange.

The remainder of this study is organized as follows. Section 2 describes the study sample and methodology. Section 3 reports the result and analysis. Last, Section 4 offers final conclusions.

METHODS

Based background and problem formulation, then this type of research is quantitative research. The research data used in this study are secondary data in the form of annual reports of energy companies *listed* on the Indonesia Stock Exchange. Furthermore, the testing tool (F test and t test) conducted in this study using *software* is SPSS to determine the effect of variable X on variable Y.

The population in this study is all energy companies *listed* on the Indonesia Stock Exchange (BEI) during the 2016-2019 period . The sampling method in this research is *purposive sampling method*. The sample criteria used by the *purposive sampling method* are as follows the energy companies listed on the Indonesia Stock Exchange during the 2016-2019 period and the energy companies which published annual reports during the 2016-2019 period. Based on the selection made in the study population, 19 obtained *firm-years* were as a research sample.

Table 1. Research Sample Selection

Criteria Sample Criteria	2016	2017	2018	Total <i>firm-years</i>
Energy companies listed on the IDX during the 2016-2018 period	7	7	7	21

Criteria Sample Criteria	2016	2017	2018	Total firm-years
Less: Energy companies that do not have active shares and are traded during the period 2016-2019	(0)	(0)	(0)	(0)
	7	7	7	21
Less: Energy companies that do not publish annual reports during the 2016-2018 period	(2)	(0)	(0)	(0)
Data used	5	7	7	19

Source: Data processed

The reason for using the 2016-2019 period as an observation period in this study is based on the release of the GRI standard in 2016 from the previous GRI still at the level of Generation 4 (not *settled*), in 2016 the *Global Sustainability Standards Board* (GSSSB) approved the GRI which then applies effective July 1, 2018. Selection of the 2016-2019 period was chosen so that the use of the 2016 GRI will be reflected in the annual report of the energy companies in 2016-2019.

CSR disclosure (*Corporate Social Responsibility*) is used as an independent variable in this study. The CSR measurement instruments used in this study refer to items based on GRI released in 2016. The GRI guidelines can be viewed on the page www.globalreporting.org. GRI classifies CSR levels based on general standard disclosures, management approach disclosures, and specific standard disclosures. Based on Haniffa and Cooke (2005) to calculate CSRI (*Corporate Social Responsibility Index*) basically uses a dichotomous approach or *dummy variable* that is each CSR item is given a value of 1 for companies that reveal items on the *list* and a value of 0 for companies that do not disclose items that is on the *list*. Furthermore, the value of each item is summed to get the total score of each company (Haniffa and Cooke, 2005).

CSRI calculation formula as follows (Haniffa and Cooke, 2005):

$$CSRI_j = \frac{\sum_{t=1}^{n_j} X_{ij}}{n_j}$$

Description:

$CSRI_j$: *Corporate Social Responsibility Index* of companies j

n_j : number of items for company j , $n_j \leq 139$

X_{ij} : *dummy variable*, 1 = if the item is disclosed, 0 = if the item is not disclosed

Thus, the value of the *Corporate Social Responsibility Index* will be more than or equal to 0 and less than equal to 1 if notated, then $0 \leq CSRI_j \leq 1$.

Market reaction as the dependent variable in this study. In measuring market reactions some previous studies used various measurements (Flammer, 2013; Astuti and Nugrahanti, 2015; Tan *et al.*, 2016; Yen and Andre, 2019). This study refers to the measurement of market reactions conducted by Flammer (2013), Astuti and Nugrahanti (2015), and Yen and Andre (2019) using *Cumulative*

Abnormal Return (CAR) as a measurement of market reactions. Jogyanto (2014) explains that in calculating *Cumulative Abnormal Return* (CAR), with two stages as follows:

First Stage

Calculates the *return* actual, using the formula as follows:

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Description:

P_{it} : Stock price of securities i on day t

P_{it-1} : Stock price of securities i on day $t-1$

R_{it} : Actual return that occurs on the stock i on day t

Calculate *returns* market using *market adjusted model*. This model is considered as a good estimator in estimating the *return* of a security.

$$R_{mt} = \frac{CSPI_t - CSPI_{t-1}}{CSPI_{t-1}}$$

Description:

$CSPI_t$: Composite Stock Price Index on day t

$CSPI_{t-1}$: Composite Stock Price Index on day $t-1$

R_{mt} : Return Market on day to day t

Next, calculate the *abnormal return* (AR_{it}) for the securities i on day t , i.e.

$$AR_{it} = R_{it} - R_{mt}$$

Second Stage

Calculating *Cumulative Abnormal Return* (CAR) by adding up or accumulating *abnormal returns* during the *event period*. By using the following formula.

$$CAR_i = \sum_{t-5}^{t+5} AR_{it}$$

Note:

CAR_i : *Cumulative Abnormal Return* of securities i within a period of time 5 days before the publication of the annual report and 5 days after the publication of the annual report.

The determination of the *event period* in this study is based on the assumption that *time intervals* too short cannot capture market reactions, and vice versa (Lev, 1989 and Junaedi, 2005). This is also supported by previous research, namely Astuti & Nugrahanti (2015), which used the *event period* during $t - 5$ and $t + 5$.

RESULTS AND DISCUSSION

Aim to provide information related to the characteristics of research variables. In this study, descriptive statistics are used to interpret 2 variables in 19 firm-years. The first variable is the market reaction which is measured using *Cumulative Abnormal Return* (CAR) in 2016-2018. Market reaction was positive on average in 2016 and 2018, while negative in 2017 with a CAR value of -0.004 (Figure 1).

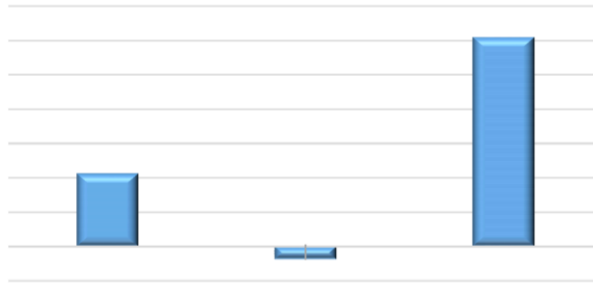


Figure 1. CAR of Energy Companies in 2016-2018
Source: Data Processed, SPSS

Whereas the market reaction when seen before and after the publication date for all sample companies in this study, there appears to be a fluctuation in the *event period* in this study. *The event period* in this study was from $t-5$ before the publication of the annual report to $t + 5$ after the publication of each company's annual report. It is based on the assumption that *time intervals* too short cannot capture market reactions, nor if *time intervals* too long are considered too biased and cannot capture market reactions (Junaedi, 2005; Lev, 1989). Following is the market reaction movement of the $t-5$ before the publication of the annual report up to $t + 5$ after the publication of the annual report (Figure 2).

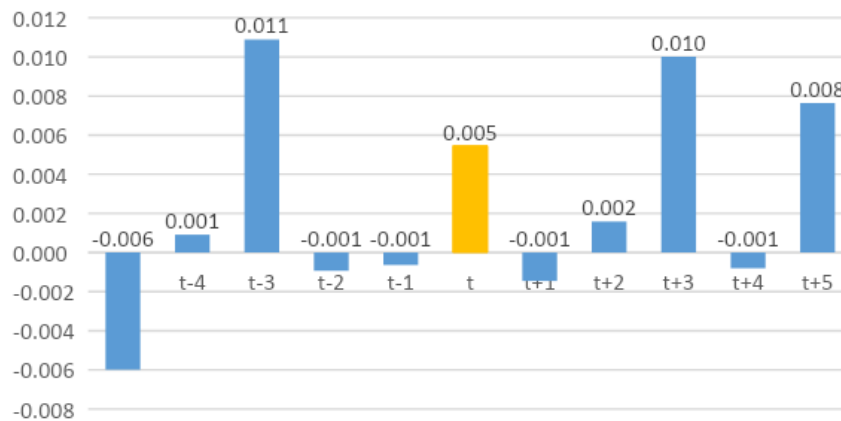


Figure 2. Market Reaction t-5 to t + 5
Source: Data Processed, SPSS

If accumulated, the comparison of average market reaction with CAR measurements before and after the publication date can be seen in Figure 3 below.

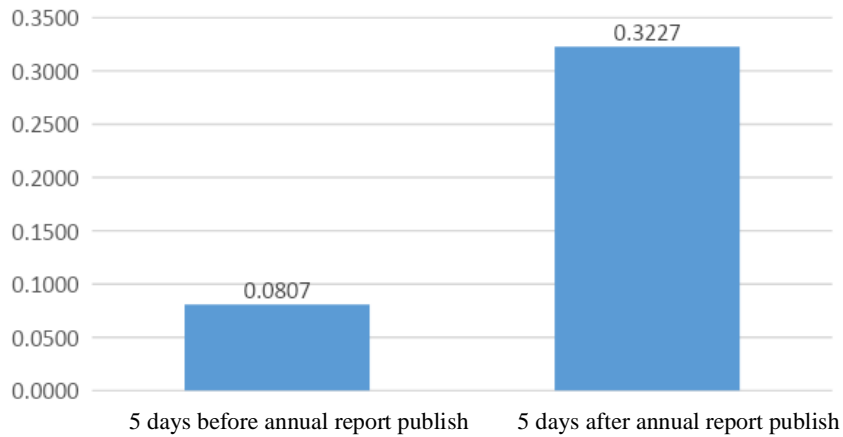


Figure 3. CAR Before and After Publication of Annual Report
Source: Data Processed, SPSS

Based on Figure 3, from 2016-2018 it is seen that market reaction is higher after the publication date. If an announcement contains information that is *good news*, then the market will be able to respond or will be able to react quickly when the information is announced or published (Hartono, 2014). This indicates that after the publication of the annual report there was an increase in market reaction.

The next research variable is GRI standard CSR disclosure. CSR disclosures based on the average value of each year are shown in Figure 4.

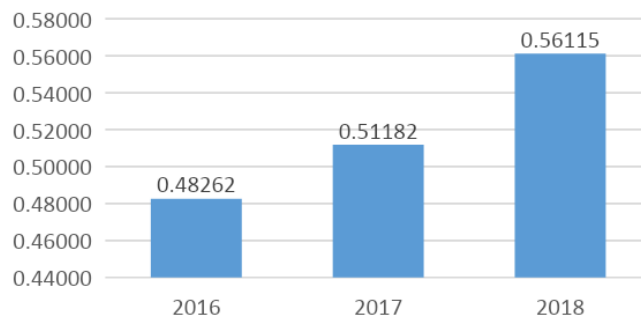


Figure 4. Average CSR Disclosures in Annual Report Energy Company 2016-2018
Source: Processed Data, SPSS

Based on the SPSS results on CSR disclosure variables in 19 *firm-years* has an average value that increases every year. The highest value of CSR disclosure is 0.79137 for companies with PGAS or PT. Perusahaan Gas Negara (Persero), Tbk in 2017 and 2018 while the lowest value of CSR disclosure was 0.38129 for companies with LAPD or PT. Leyand International, Tbk in 2016.

Based on the classic assumption test in this study heteroscedasticity, did not occur, there was no autocorrelation, and normal data. Testing the hypothesis in this study is to use the test t. The Test was t used to test the level of significance of the influence of the independent variables on the dependent variable individually (partial) with a level of significant (α) of 5%. Based on the test results t obtained that the level of significance of CSR disclosure variables in the resulting

regression model is 0.671 greater than 0.05 (5%). From these results it can be concluded that the probability of > 0.05 , H_0 is not successfully rejected. This indicates that GRI standard CSR disclosure has no effect on the market reaction of energy companies listed on the Indonesia Stock Exchange.

The results in this study begin with a discussion of the results of descriptive statistics on CSR disclosures with average results increasing each year. The average disclosure of CSR in energy companies in Indonesia increases every year to 0.48262 in 2016; 0.51182 in 2017; and 0.56115 in 2018. This increase in the average CSR disclosure indicates that energy companies are increasing in expressing social, economic and environmental responsibility from year to year. The increasing disclosure of CSR shows the concern of energy companies towards CSR regulations in Indonesia, one of which is Law Number 40 Year 2007 concerning Limited Liability Companies and CSR regulations in the international world, the Global Reporting Initiative which was ratified in October 2016.

Based on testing the hypothesis in this study that GRI standard CSR has no effect on the market reaction of energy companies listed on the Indonesia Stock Exchange. This indicates that CSR disclosure using CSR standards that were passed in 2016 energy companies in Indonesia during 2016-2018 did not affect the market reaction as measured by Cumulative Abnormal Return (CAR).

The results of this study are in line with the research of Astuti & Nugrahanti (2015) that there is no influence of CSR on abnormal return. Astuti & Nugrahanti (2015) measure CSR with Third Generation GRI standards and measure CAR with an event period 5 days before and after publication in the 2013 annual report of manufacturing companies listed on the Indonesia Stock Exchange. Astuti & Nugrahanti (2015) research cannot explain signaling theory because the information published does not provide enough signals that can cause changes in investor confidence and cause certain actions.

The results of this study differ from studies conducted by Flammer (2013) and Yen & André (2019) which results in the influence of CSR disclosure on market reaction. Flammer (2013) used a sample of companies Go Public in the United States (US) during 1980 to 2009 in his research measuring market reaction variables using Cumulative Abnormal Return (CAR) while for CSR variables using the KLD index. Flammer (2013) research results prove that there is an influence between market reaction and CSR level which indicates that US shareholders react positively to CSR announcements because it is related to the environment, US companies adhere to the enforcement of norms related to CSR disclosure, and CSR reduces company profits so CSR companies that use environmental resources will reduce the benefits of implementing CSR. In their research, Yen & André (2019) used samples from companies in 23 developing countries from 2008 to 2014. The study concluded that CSR raises investor concerns that will reduce their profits and the need for assertiveness of local governments regarding the implementation of CSR.

An interesting result in this research is an increase in CSR disclosure in energy companies from year to year. This indicates the concern of energy companies towards regulations on CSR both nationally and internationally. This is because in this study using GRI standards that apply globally as a benchmark. However, the increase in CSR disclosure is counter to the results of research that are not positively related to the increase in Cumulative Abnormal Return. Based on the pattern of market reaction data it appears that the market reaction did not increase along with the increase in CSR disclosure. The results of this study revealed that the market reaction was negative in 2017 while CSR disclosures increased compared to the previous year.

The results of this study confirm that companies in Indonesia have not fully implemented the GRI standard. This is different from companies in the US that comply with regulations related to CSR (Flammer, 2013). The results of this study are also due to differences in the level of company compliance in CSR disclosures to regulations in force in a country. Regulation on CSR disclosure will run well with the presence of rewards and punishment strictin the application of the regulation. The firmness of the state regarding the implementation of regulations related to CSR disclosure was also revealed by the research of Yen & André (2019) so that there needs to be a change in mindset from companies to be more concerned with economic, social and environmental issues.

The next interesting thing is the market reaction after the publication of the annual report that is after publication (t+1 to t+5) is higher than before the publication of the annual report (t-5 to t-1). Comparing the various analyzes above it can be concluded that the increase in market reaction after the publication of the annual report was not caused by CSR disclosures. This also indicates that investors might react outside the event period. Investors consider that disclosure signals disclosed in the company's annual report are difficult to measure its economic value so that it takes a long time for investors to react to these signals (Hartono, 2014). Based on the results of research investors are more concerned with earnings information to assess the company compared to social information disclosed by the company.

The results of the CSR disclosure research on market reactions are also different from theory stakeholder. Theory stakeholder id used to predict or explain CSR actions against company stakeholders that can influence CSR decisions (Freeman, 2017; Roberts, 1992). In the results of this study the possibility of stakeholders other than investors still assume that CSR carried out by the company is oriented to long-term company performance, while the thinking as an investor or potential investor is only about how to optimize short-term company performance. In addition, the high costs required by companies to implement CSR programs can also be a cause for investors to be reluctant to invest, because they regard the costs for CSR programs as a waste that actually reduces company profits.

The implication in this research is the need for binding regulations for energy companies in Indonesia given the many cases concerning environmental, social and economic issues that occur so that with a clear reward and punishment for CSR in Indonesia will increase the concern of energy companies in implementing CSR. Considering some of the vision of energy companies is the use of renewable energy, it is necessary to have an innovation on environmentally friendly renewable energy from energy companies today. From the company side, with the regulation and innovation the company is expected to be able to further increase CSR disclosure in accordance with globally applicable standards namely the GRI standard and further enhance its concern for CSR related to economic, social and environmental impacts. In terms of investors and prospective investors, the existence of regulations and innovations can be more selective in investing in companies that comply with regulations and are not only concerned with returns investment.

CONCLUSION

Based on the results of tests conducted using a sample of 19 companies in the 2016-2018 period. Results of testing the hypothesis generating that H0 is not successfully rejected. This means that GRI standard CSR disclosure has no effect on the market reaction of energy companies listed on the Indonesia Stock Exchange. The results of this study are also due to differences in the level of company compliance in CSR disclosures to regulations in force in a country. Regulation on CSR disclosure will run well with the presence of rewards and punishment strictin the application of the regulation. Based on the results of research investors are more concerned with earnings information to assess the company compared to social information disclosed by the company. In the results of this study the possibility of stakeholders other than investors still assume that CSR carried out by the company is oriented to long-term company performance, while the thinking as an investor or potential investor is only about how to optimize short-term company performance. In addition, the high costs required by companies to implement CSR programs can also be a cause for investors to be reluctant to invest, because they regard the costs for CSR programs as a waste that actually reduces company profits.

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REFERENCES

- Astuti, C. W., & Nugrahanti, Y. W. (2015). Pengaruh Pengungkapan Corporate Social Responsibility Terhadap Reaksi Pasar. *Dinamika Akuntansi, Keuangan, Dan Perbankan*, 4(2), 90–105.
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal*, 56(3), 758–781. <https://doi.org/10.5465/amj.2011.0744>
- Freeman, R. E. (2017). *Response : Divergent Stakeholder Theory Author (s) : R . Edward Freeman Source : The Academy of Management Review , Vol . 24 , No . 2 (Apr . , 1999) , pp . 233-236 Published by : Academy of Management Stable URL : http://www.jstor.org/stable/259078 REFER. 24(2), 233–236.*
- GRI. (2016). GRI 101: Fundamental 2016. *Gssb*, 1(1), 30. <https://www.globalreporting.org/standards/media/1439/spanish-gri-101-foundation-2016.pdf>
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–108. <https://doi.org/10.1108/09513579610109987>
- Hari, L. (2016, June 24). Evaluasi, 10 Tahun Kasus Lapindo. *Harian Kompas*. <http://regional.kompas.com/read/2016/04/26/15050011/Evaluasi.10.Tahun.Kasus.Lapindo>
- Hartono, J. (2014). *Teori Portofolio dan Analisis Investasi (Ke 9)*. BPEF Yogyakarta.
- Junaedi, D. (2005). Dampak Tingkat Pengungkapan Informasi Perusahaan Terhadap Volume Perdagangan Dan Return Saham: Penelitian Empiris Terhadap Perusahaan-Perusahaan Yang Tercatat Di Bursa Efek Jakarta. *Jurnal Akuntansi Dan Keuangan Indonesia*, 2(2), 1–28. <https://doi.org/10.21002/jaki.2005.08>
- Lev, B. (1989). On the Usefulness of Earnings and Earnings Research: Lessons and Directions from Two Decades of Empirical Research. *Journal of Accounting Research*, 27, 153–192. <http://www.jstor.org/stable/2491070>
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Accounting, Organizations and Society*, 17(6), 595–612. [https://doi.org/10.1016/0361-3682\(92\)90015-K](https://doi.org/10.1016/0361-3682(92)90015-K)
- Yen, T. Y., & André, P. (2019). Market reaction to the effect of corporate social responsibility on mergers and acquisitions: Evidence on emerging markets. *Quarterly Review of Economics and Finance*, 71, 114–131. <https://doi.org/10.1016/j.qref.2018.07.003>
- Zuhroh, D., & Sukmawati, I. P. P. H. (2003). Analisis Pengaruh Luas Pengungkapan Sosial dalam Laporan Tahunan Perusahaan terhadap Reaksi Investor. *Jurnal Dan Prosiding Simposium Nasional Akuntansi*, 6.