THE VALUE RELEVANCE OF ENVIRONMENTAL PERFORMANCE, CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE, AND RETURN ON EQUITY

Ega Jenny Gunardi
Luky Patricia Widianingsih
Anastasia Filiana Ismawati
Universitas Ciputra Surabaya
egajenny99@gmail.com
luky.patricia@ciputra.ac.id
anastasia.filiana@ciputra.ac.id

ARTICLE INFO

Article history:
Received : 14 April 2021
Revised : 19 April 2021
Accepted : 19 April 2021

Keywords:
Value relevance, environmental performance, corporate social responsibility, green accounting

DOI:
https://doi.org/10.33508/rima.v4i1.3130

ABSTRACT
This study aims to examine the value relevance of green accounting practice measured by environmental rating through PROPER, which is assessed by the Ministry of Environment and Forestry (KLHK), and environmental disclosure activities from an internal party, called sustainability report, of listed mining and agriculture companies on the Indonesian Stock Exchange. This study also tests whether the return on equity can strengthen the value relevance of environmental performance and CSR disclosure. The sample consists of 63 firm-year observations. The empirical results showed that the book value of equity and earnings on share price is significant. The study reveals book value of equity exhibits a negative relationship in stock price, while earnings exhibit a negative relationship. However, environmental performance and CSR disclosure are not statistically significant in terms of share price, concluding they do not have value relevance. The study also found that ROE has not succeeded in strengthening the value relevance of environmental performance and CSR disclosure.

INTRODUCTION

Investors start to consider non-financial information enhancing managers to increase attention to social and environmental responsibility. In other words, non-financial information, such as environmental activities, is also needed by investors to make economic decisions.

The information has a role in assessing relevance as a basis for decision making and so-called value relevance (Ibrahim et al., 2009) in (Arum, 2019). This relevance shows environmental and social issues as a part of a corporate stakeholder diversity comprising socially responsible investors (Clarkson et al., 2011; Clarkson et al., 2008; Deegan, 2004; Qiu et al., 2016) in (Mohammadi et al., 2018).

The manager must strive for environmental preservation because the company's presence often ignores environmental aspects to get cost-efficient so that environmental pollution cannot be avoided (Arum, 2019). The environmental damage is caused by many factors, such as forest damage, increased greenhouse gas emissions, and fatalities (Geiger, 2019; Kridhangkara, 2019).

Therefore, companies are forced to fulfill obligations to provide and disclose information about their environmental activity. This study chooses mining and agriculture companies, categorized as a primary sector on the Indonesian Stock Exchange. This sector is facing directly to natural resources, and environmental damage they did is considerable, which is forest burned reach 3.4 million hectares in Indonesia in 2015–2018. One of the significant factors causing that thing is to open new agricultural land (Cahyaningtyas, 2020; Rusmana, 2019). Moreover, mining companies left holes after their activity that caused people to fall into it and die (Kridhangkara, 2019).

A new concept, called green accounting, is created to provide solutions for companies doing activities that might cause harm to the environment or the community (Sulistiawati & Dirgantari, 2016). Burnett & Hansen (2008) in Arum (2019) says that if a company wants to improve its environmental performance, accounting must be involved. This function helps collect, calculate, analyze, and report environmental costs and other transactions related to the environment to manage environmental aspects.

Green accounting practices in this study measured by environmental performance through PROPER ratings, which are assessed by the Ministry of Environment and Forestry (KLHK), and environmental disclosure activities from an internal party, called sustainability report, of listed mining and agriculture companies on the Indonesian Stock Exchange. Research about the value relevance of environmental performance and *Corporate Social Responsibility* (CSR) disclosure has been done numerous times. However, the result obtained is inconsistent.

Numerous studies proved that environmental performance and CSR disclosure have value relevance (Sarumpaet et al., 2017; Nasieku & Memba, 2018; Farhana & Adelina, 2019). The environmental performance also significantly impacts firm value (Mardiana & Wuryani, 2019; Satrio & Kunto, 2020). Other studies could not prove the environmental performance and CSR disclosure (Landi & Mauro, 2019; Hendrayani et al., 2019). Narullia & Subroto (2018) explained that there is no CSR disclosure found on the value relevance of companies in Singapore and Indonesia due to the low report quality in both countries.

There is inconsistency in the research result, which shows another variable contributing to the relationship in environmental performance, CSR disclosure, and share prices (Pratama et al., 2016) in (Mardiana & Wuryani, 2019). Hendrayani et al. (2017) stated the importance of increasing profits to drive up investor's interest, which shows the significance of the profit level of a company. Therefore, this study also tests whether the return on equity (ROE) can strengthen the value relevance of environmental performance and CSR disclosure.

LITERATURE REVIEW

Legitimacy Theory and Stakeholder Theory

The legitimacy theory stated by Sulistiawati & Dirgantari (2016)
The organization will strive to follow upheld society's values and ensure that what the organization does is accepted by outsiders (legitimized). The legitimacy theory perspective sees that the company will disclose its activities voluntarily by managers as meeting the community's expectations (Arum, 2019). The company will consistently demonstrate what is done in accordance with social values (Arum, 2019).

Stakeholder theory is also a theory that supports this research model because a company exists not only for its own sake but also to provide benefits to stakeholders (Arum, 2019). Clarkson (1995) in (Toppinen & Korhonen-Kurki, 2013) defines stakeholders as divided into two layers: stakeholders' primary and secondary stakeholders.

Primary stakeholders are participants whom the company needs to run and survive, such as shareholders, employees, government, suppliers, and customers. Secondary stakeholders are not making transactions directly to the company, but they are affected by its operations. Relevance of Non-Financial Information. Value relevance is defined as the ability of the information presented in the financial statements to describe and conclude the company's value (Karğın, 2013).

Information obtained and used by investors of financial statements can be reflected in the price of a company's share, thus reflecting the present value of the company's future economic benefits (Badu, 2018). Today's investors use not only financial information but also non-financial information. This information indicates that non-financial information will be reflected in the latest share price, so that non-financial information will also likely impact future earnings (Jiambalvo et al. (2002) in Sarumpaet et al., 2017).

Increasing the relevance of earnings value and book value in that context variety is needed considering that value relevance is one of the quality attributes of accounting, which shows that accounting information still has a relevant role to play investors to make decisions (Sarumpaet et al., 2017; Arum, 2019).

Environmental Performance

Environmental performance results from measurable environmental management linked to environmental control aspects (Sulistiawati & Dirgantari, 2016). Environmental performance is measured using the Company Performance Rating Program in Environmental Management (PROPER) issued by the Ministry of Environment and Forestry (KLHK). This rating program is regulated in the Regulation of the Minister of Environment Number 3 of 2014 using a legal basis Law Number 32 of 2009 concerning Environmental Management and Protection (PPLH) and Government Regulation of the Republic of Indonesia Number 27 of 2012 concerning Environmental Permits.

Several research results prove that environmental performance affects the price index stocks, showing this information to be added value for investors to assess the performance finance in the future (Sarumpaet et al., 2017; Teja et al., 2018). Therefore, researchers formulated the hypothesis as follows.

H1a: Environmental performance has value relevance

Corporate Social Responsibility Disclosure

Corporate social responsibility (CSR) provides new perspective managers that the company must involve itself in the relationship with its stakeholders' interest to give sound to them and show that company 3 committed to executing the right strategy and business processes (Kiranmai & Swetha, 2018). Utomo (2019) states that social responsibility is a natural corporate mechanism that reverses the situation of the people who are affected by the decisions or activities of the company harm others, whether accidentally or deliberately.

High disclosure of social responsibility shows that the company provides transparency and concern for the environment (Sembiring, 2017). Information disclosure practices social and environmental issues have not only an impact on reputation and capacity company management, but also the company's ability to differentiate between the interests of those parties impacted by company operations, such as issues of pollution, energy conversion, human rights, and community development (Perrault and Clark (2016) de Villers et al., (2011), and Comnys (2016) in Mohammadi et al., 2018).

A good reputation in a company is a very strategy to have sustainable relationships with a wide variety of stakeholders and improve access to capital; in other words, the financial performance also has a positive connection with the disclosure of social responsibility (Ullmann (1985), McGuire et al. (1988); Hasseldine et al. (2005) in Saha et al., 2019). The researcher applies the following hypothesis.

H1b: CSR disclosure has value relevance

Profitability

Profitability is defined as the company's ability to benefit from business activities using funds owned by the company (Kusuma et al., 2019). The high level of profit shows the effectiveness of deep management in managing company resources (Mardiana & Wuryani, 2019). Profitability in a company can be measured using return on equity (ROE). ROE is a comprehensive indicator of a company's performance because it can indicate how well the managers can use the funds invested by the shareholders to generate returns (Palepu et al., 2013). Therefore, the researcher formulated the hypothesis as follows.

H1c: ROE reinforces the value relevance of environmental performance

H1d: ROE strengthens the value relevance of CSR disclosure

RESEARCH METHOD

This study used pooled data type. Pooled data is a data set with cross-sectional and time-series features, but the observations in each cross-section do not necessarily refer to the same unit (Manzoor, 2018). The annual report and CSR disclosure through sustainability report from 2014 to 2019 were obtained from the official website's listed firm. The environmental performance rating was obtained from Ministerial Decree, which is released annually by KLHK.

Population and Sample

This study population consists of 40 listed mining companies and 17 listed agriculture companies under the Indonesian Stock Exchange. The sample was selected using purposeful sampling. Purposeful sampling is non-random method sampling using specific criteria. The companies that had never been delisted on the Indonesian stock exchange acquired environmental rating and published annual report and sustainability report through their official website research period.

Operational Definition & Variable Measurement

1. Share price

The share price is the single share price on a stock exchange at a specific time affected by demand and supply. This study uses share prices after three months after the end of the fiscal year, which means they are share prices as of 31 March the following year of the related financial report (Sarumpaet et al., 2017).

2. Book Value Per Share

Book value per share is calculated by dividing the book value of equity of company *j* at year *t* by the number of shares outstanding. Book value of equity is accounting information that represents the net value of an asset of a firm.

$$\mathrm{NBS} = \frac{\mathrm{NAB}\ j, t}{\text{number of shares outstanding}}$$

3. Earnings Per Share

Earnings per share is a ratio calculated by dividing the net profit of company *j* at year *t* by the number of shares outstanding. Studies have shown that earnings contain valuable information for shareholders to examine the firm value (Sarumpaet et al., 2017).

$$\text{LPS} = \frac{\text{Ney profit } j, \text{t}}{\text{number of shares outstanding}}$$

4. Environmental Performance

Environmental performance is defined as company performance to create a green environment (Suratno et al., 2006) in (Teja et al., 2018). The environmental performance will be assessed using PROPER ratings. PROPER rates corporate environmental performance using five color codes: black, red, blue, green, and gold, indicating the poorest to best environmental performance (Indonesia Ministry of Environment, 2012; in Sarumpaet *et al.,* 2017). Also, companies could still delay their law enforcement in the Ministry's Decree; therefore, they are given 0.

Companies usually achieve more than one rating because they have more than one operating facility, so that this study will use averaged ratings. For example, in 2019, PT Bumi Resources Tbk. (IDX Ticker: BUMI) was awarded one blue and three greens for its three facilities located in different areas. The average rating for BUMI is 3.25.

5. Corporate Social Responsibility Disclosure

Corporate social responsibility disclosure is a social and environmental communication process on a company's economic activities towards the community, consist of economic, social, and environmental aspects. Disclosure scores were based on the ratio disclosure index on the sustainability report. Therefore, the authors will award a score of 1 for disclosure and 0 for non-disclosure.

The total disclosure of company *j* at the year *t* will be divided by 91 as the total maximum index disclosure. This variable is aligned with legitimacy theory, which states that organizations will operate in accordance with the community's value and assure their operations are accepted. Therefore, companies publish sustainability reports to legitimate themselves to stakeholders.

$$\text{CSRD} = \frac{\sum \text{CSRD } j, t}{a, j}$$

6. Return on Equity (ROE)

ROE is a comprehensive income indicator of a firm's performance because it provides an indicator of how well managers are employing the funds invested by the firm's shareholders to generate returns (Palepu et al., 2013). ROE is calculated by dividing the net profit of company *j* at the year *t* by the number of shares outstanding.

$$\text{ROE} = \frac{\text{Net profit } j, t}{Book\ value\ of\ equity}$$

<u>*Data Analysis Method*</u>

A descriptive statistics test shows the lowest and highest value, mean, standard deviation for each variable in this study. This test will help researchers understand the characteristics' variables on the two sectors. Data will then pass the definitive assumption tests consist of normality, heteroscedasticity, multicollinearity, and autocorrelation.

After data pass the classical assumption test, the following steps are testing hypotheses: F-test, t-test, and coefficient of determination. The regression which used to test value relevance of environmental performance-ratings and CSR disclosure, as well as the additional moderation variable, which is ROE, are follows:

HSjt+1 = α + β 1NBSjt + β 2LPSjt + β 3PROPERjt + β 2CSRDIjt...........(1)

$HSjt+1 = \alpha + \beta 1\ NBSjt + \beta 2\ LPSjt + \beta 3\ PROPERjt + \beta 4\ CSRDIjt + \beta 5\ ROE\ jt + \beta 6\ \left| PROPERjt - ROEjt \right| + \beta 7\ \left| CSRDIjt - ROEjt \right|$

RESULTS AND DISCUSSION

This study aimed to list mining and agriculture companies on the Indonesian Stock Exchange in 2014–2019. The total samples obtained were 16 companies with 65 observations. However, this study must eliminate 2 data in order for the data to pass the classic assumption rest and be continued to the hypothesis test.

Tabel 1. Sample Data

No.	Companies List	Year					
		2014	2015	2016	2017	2018	2019
1	Astra Agro Lestari Tbk.	✓	✓	✓	✓	✓	✓
2	Austindo Nusantara Jaya Tbk.			✓	✓	✓	
3	Eagle High Plantation Tbk. (d.h. BW Plantation Tbk.)				✓	✓	✓
4	PP London Sumatra Indonesia Tbk.				✓	✓	✓
5	Salim Ivomas Pratama Tbk.	✓	✓	✓	✓	✓	✓
6	Sawit Sumbermas Sarana Tbk.			✓	✓	✓	
7	Bakrie Sumatera Plantations Tbk.	✓	✓				
8	Adaro Energy Tbk.						✓
9	Bumi Resources Tbk.				✓	✓	✓
10	Indo Tambangraya Megah Tbk.	✓	✓	✓	✓		✓
11	Tambang Batubara Bukit Asam (Persero) Tbk.	✓	✓	✓	✓	✓	✓
12	Petrosea Tbk.	✓	✓	✓	✓	✓	✓
13	Medco Energi Internasional Tbk.	✓			✓	✓	✓
14	Aneka Tambang (Persero) Tbk.	✓	✓	✓	✓	✓	✓
15	Vale Indonesia Tbk.				✓	✓	✓
16	Timah (Persero) Tbk.				✓	✓	✓
Total		8	7	8	14	13	13
		63					

Descriptive Statistics

The statistics descriptive of 63 observations are presented in Table 2. The lowest value of HS IS Rp 50, while the highest value is Rp 28,625. On average, share prices of all companies around Rp 3,576.4, with a standard deviation of Rp 6,123. 2. This shows the relatively wide range of samples. The book value per share has an average of Rp 2,867.7, with a standard deviation of Rp 3,362.67, while the earnings have an average of Rp 317.5, with a standard deviation of Rp 602.9.

This value also shows the relatively wide range of samples. However, it can be seen that the lowest value of earnings reach Rp -171, which means there are companies with negative earnings in this study that might influence the examination. PROPER ratings, which are achieved by the mining and agriculture sectors, have an average of 3.16, with a low standard deviation of 0.39. This rate indicates the mining and agriculture companies have been pushing to operate within the scope of the law.

The CSRDI has an average of 38.55%, with a standard deviation of 17.74%. It represents CSR disclosure which has been done, is still needed to be increased. ROE has an average of 1.08, with a standard deviation of 0.67. The standard deviation of ROE is lower than the average, which means that the average can show how much mining and agriculture companies can generate a return from financiers of 108%.

Tabel 2. Descriptive Statistics

Variable	Obs.	Mean	SD	Minimum	Maximum
Book Value Per Share	63	2.867,69	3.362,67	59.43	11.506,06
Earnings Per Share	63	317,4481	602,86796	-171,63	3.034,65
PROPER	63	3,1607	0,39470	1,5	4,0
CSR Disclosure	63	38,5488%	17,73716%	10,99%	97,80%
Return on Equity	63	1,0722	0,66581	0,06	3,67
Share Price	63	3.576,4603	6.123,178	50	28.625

Data Quality Test

The data is passed a normality test after transformation of *Logarithm natural* (Ln). The data is passed in a heteroscedasticity test. The data passed a multicollinearity test after the researcher eliminated two data. The data is also passed the autocorrelation test.

Multiple Linear Regression

The first regression model, which measures the value relevance of PROPER and CSR disclosure, is presented in Table 3. Result obtained has a significance of 0.000, which then can be used for further testing. The significance that is lower than 5% also shows that book value per share, earning per share, environmental performance, and CSR disclosure have value relevance. However, whether PROPER and CSR disclosure has value relevance or not, the hypothesis's result shows significance value is higher than 0.05.

Therefore, accounting information about book value and earnings still have value relevance, but PROPER and CSR diSclosure are not. Despite environmental performance ratings being good enough, it still does not affect investor's decisions. However, looking at the statistic descriptive of CSR disclosure shows that it still needed to be increased.

Table 3. Regression Result of Value Relevance of PROPER and CSR Disclosure

Variable	Coefficients	t value	p value
Book Value Per Share	-1.481*	-6.220	0.000
Earnings Per Share	1.164*	3.720	0.000
PROPER	1.710	1.764	0.083
CSR Disclosure	0.113	0.302	0.709
Constant	8.775	6.002	0.000
N		63	
Adjusted R^2		0.494	
F		16.15	
Prob. > F		0.000	
Note: *p < 0.05			

Moderated Regression

A moderated regression model is expected to show that PROPER and CSR disclosure has value relevance with an additional moderating variable, which is ROE. The moderated regression model has a significance value of 0.000 in Table 4 which concludes that the model can be used for testing hypotheses.

The significance value of 0.000 also indicates that book value per share, earning per share, PROPER, CSR disclosure, and moderated interaction have value relevance. However, results for testing hypotheses show that ROE has not strengthened the value relevance of PROPER and CSR disclosure because the significance value is more than 0.05. This value indicates a phenomenon going on during the research period that caused the hypothesis to be rejected.

The result of significance PROPER is higher than 5%, which shows that PROPER does not have value relevance. This result is in accordance with the first testing by Sarumpaet et al. (2017) and research by Landi & Mauro (2019). This result happened because the research was done by mixing all samples from lower to a higher rating. This study cannot prove that environmental performance has value relevance because the ratings achieved by agriculture and mining companies tend to be static.

Three sample companies, PT Austindo Nusantara Jaya Agri Tbk., PT Eagle High Plantations Tbk., dan PT Petrosea Tbk., do not increase their ratings in the period of this study. Companies that have achieved color of blue in PROPER seem not to increase their ratings for the performance. The company's adherence to environmental development, both physically and socially, is at the middle level, which means still at the level of obedience, but has not positively impacted the community's quality of life (Redaktur, 2017).

Value relevance of CSR disclosure is also found not significant due to the lack of law that regulates the implementation and supervision of CSR disclosure; therefore, investors are not specific with the voluntary

Table 4. Regression Result of ROE Strengthen Value Relevance of PROPER and CSR Disclosure

Variable	Coefficients	t value	p value
Book Value Per Share	-1.5	-6.238	0.000
Earnings Per Share	1.188	3.791	0.000
PROPER	-0.757	-1.747	0.086
CSR Disclosure	-0.268	-0.538	0.593
ROE	0.356	0.671	0.505
|PROPER - ROE|	-0.009	-0.084	0.933
|CSRD - ROE|	0.09	0.08	0.465
Constant	8.775	6.002	0.000
N		63	
Adjusted R^2		0.489	
F		9.47	
Prob. > F		0.000	
Note: *p < 0.05			

information given. Investors prefer other decision-making factors, such as *neutral information, accounting information, self-image, personal financial needs* (Christianti & Mahastanti, 2011) in (Permatasari & Widianingsih, 2020).

The result is yet to support stakeholder theory that a company would not survive for itself but must provide benefits to their stakeholder. The legitimacy theory's perspective on the company's focus reveals that activities derived from stakeholder pressure on managers to fulfill the community's expectation, which investors then appreciate with higher share prices, are not proven in this research.

One of the reasons this study could not find the significant impact of CSR disclosure is agricultural and mining companies do not publish sustainability reports consistently each year. Therefore, investors have not considered CSR disclosure in investment decision-making. Instead of using CSR disclosure that is not published consistently, investors use an annual report with a certainty of publishing.

The result of value relevance of environmental performance rating (PROPER), which ROE strengthens, shows that significant value is higher than 5%, which means H_{1c} is rejected. This study is inconsistent with Mardiana & Wuryani (2017). The result of descriptive statistics of PROPER has an average that reaches a value of 3, which indicates that the average performance that has been done is good enough (Sarumpaet et al., 2017).

ROE could not strengthen the value relevance of environmental was predicted to be the result of the fluctuation of the mining and agriculture sectors during the research period. The agriculture sector was deep reconditioning from 2012 to 2017 (Andiantyo et al., 2018). The economy's slow growth impacts the mining sector and predicts why the result could not show significant value.

The result of value relevance of CSR disclosure which ROE strengthens, shows t value is lower than the t table (2,00404), and significance value is higher than 5%, which means H_{1d} is also rejected. Even though CSR disclosure practices that used sustainability reports are in accordance with G4 and GRI standards, companies have strived to legitimize themselves, which aligns with legitimacy theory.

Guthie & Parker (1990) in Saha et al. (2019) argued that CSR disclosure is also a reactive response from stakeholder pressure which aligns with stakeholder theory. CSR disclosure of a company is strategic because the company builds an excellent reputation for sustaining relationships with different stakeholders and improving access to capital financing.

In other words, an entity's financial and economic performance has a positive connection with its social responsibility (Ullmann,1985; McGuire et al., 1988; Hasseldine et al., 2005) in (Saha et al., 2019). Good reputation plus high profit will make companies have more credibility (Hendrayani et al., 2017). However, the result of this study is inconsistent with the theory and argumentation that have been mentioned above.

ROE is not significantly impacted on share price because significance ROE is shown higher than 5%. This result is inconsistent with Hendrayani et al. (2017), which showed that ROE could significantly affect the share price. This result shows mining and agriculture sector is under pressure during the research period, which impacted the financial performance of those sectors.

The results are insignificant due to the mining and agriculture sector that is highly sensitive to the world's commodity prices. During the research period, the economic condition weakens the world's commodity prices. This condition was caused by the anti-palm oil movement in the European Union, the US and China trade war, and the decreasing oil prices and rubber prices in 2014-2015 and 2018-2019. (Bappenas, 2018; Ardiansyah, 2020; Rahayu & Sugianto, 2020).

The slowing down of the global economy hinders the trade volume and the world's low commodity prices, which caused mining companies' poor financial performance. It also affects the restrictions of coal imports, particularly from China. This situation generates a significant decrease in the company's financial performance (Lasmana & Ashariah, 2019).

The decrease in coal demand brings about the overwhelming supply globally; therefore, the prices decrease during 2019. In the agriculture sector, crude palm oil (CPO) shows a downward trend from 2010 to 2018 (Sudoni, Ha. *et al.,* 2019). This is suited to the decrease in palm oil companies' share prices in the Indonesia stock exchange.

The downward trend of commodity prices during the research period was caused by low crude oil prices, weak growth of the global economy, restrictions from China, weak Indian currency against the US Dollars due to the US-China trade war. Therefore, as the biggest importer after China, India resists coal imports and maximizes domestic production of coal (Wahyuningtyas & Mardiyah, 2019).

This can be shown in Table I, the lowest value of LPS Rp -171,63 per share. It can be concluded that these factors are the ones causing the incapability of ROE to strengthen the value relevance of environmental performance and CSR disclosure.

CONCLUSION

Environmental performance and CSR disclosure have no statistically significant impact in terms of share price, which shows that they still do not have value relevance. Book value of equity and earnings still become an explanatory power of firm value to investors. This study concluded that investors still use the annual report to value a company and make a decision. Investors have not utilized information about environmental performance and CSR disclosure in the decision-making process because of the inconsistent publishing of CSR disclosure on sustainability reports from internal parties.

Adding a profitability ratio as a moderator on a testing value relevance of environmental performance and CSR disclosure still could not enhance their explanatory power in addressing its share price. This condition shows that environmental performance and CSR disclosure that companies have done are not enough to interfere with an investor's decision despite the additional information regarding the company's profit. This happens because the unique characteristics' sectors studied, mining and agricultural companies, are sensitive to commodity prices policy.

This study was only conducted for 16 listed mining and agriculture companies from 57 companies, which means the sample of this study is relatively small. The research period is affected by the trade war and the restrictions from China. Those cause results of the hypotheses' tests have no significant value due to the mining and agriculture sector that is highly sensitive to economic conditions, which is the world's commodity prices. Even though the researcher has used different criteria in choosing the samples, result generalization must be translated into extra care.

Future research ideas might be interesting to measure environmental performance using different measurements, such as questionnaires or surveys to the company's manager to evaluate environmental performance. This study only could analyze value relevance, which used ratings that companies achieved from external parties are relatively static. The other idea that still uses environmental performance rating is comparing high-ranking industries to those gathering low/no ratings.

Value relevance measured by share price definitely can reflect the actual condition of firm value that investors give. However, the share price is affected by so many factors. One of them is the world's commodity prices which affect share prices of mining and agriculture companies which causes value relevance which is measured by share prices will be biased. Therefore, future research is expected to use questionnaires to acquire more apparent results on how environmental performance and CSR disclosure affect investing decisions.

REFERENCES

Andiantyo, P., Sihombing, P., & Sri Yani K. (2018). Pergerakan Indeks Harga Saham, *Seminar Nasional Cendekiawan ke 4 Tahun 2018*, 1137–1148.

Ardiansyah, T. (2020). Uni Eropa Berlakukan Pembatasan Sawit, Harga CPO Runtuh. Retrieved from https://www.cnbcindonesia.com/market/20190524103315-17-74804/uni-eropa

Arum. (2019). The Implementation Of Green Accounting And Its Implication On Financial Reporting Quality In Indonesia. *Journal of Business Studies and Management Review*, *3*(1), 67–75.

Badu, B. (2018). Value Relevance Of Accounting Information : An Emerging Country Perspective. *Journal of Accounting & Organizational Change*, *14*(4), 473–491. https://doi.org/10.1108/JAOC-07-2017-0064

Bappenas. (2018). Harga Komoditas Internasional Oktober 2018, *Direktorat Perencanaan Makro dan Analisis Statistik.*

Cahyaningtyas, A. (2020). Sparking Debate Over Fire Use on Agricultural Land In Indonesia. Retrieved from https://forestnews.cifor.org/58756/sparking-debate-over-fire-use-agricultural-land-in-indonesisa?fnl=en

Farhana, S., & Adelina, Y. E. (2019). Relevansi Nilai Laporan Keberlanjutan Di Indonesia, *Jurnal Akuntansi Multiparadigma*, *10*(3), 615–628. https://doi.org/10.21776/ub.jamal.2019.10.3.36

Geiger, J. (2019). *Greta Thunberg's Not-So-Little Carbon Footprint*. Retrieved from https://oilprice.com/The-Environment/Global-Warming/Greta-Thungbergs-Not-So-Little-Carbon-Footprint.html

Hendrayani et al. (2019). Pengaruh Pengungkapan Corporate Social Responsibility Dan Leverage Terhadap Harga Saham : Profitabilitas Sebagai Pemoderasi, *Jurnal Ekonomi dan Bisnis, 6*(11), 3765–3794.

Karğın, Sibel. (2013). The Impact of IFRS on The Value Relevance of Accounting Information: Evidence from Turkish Firms. *International Journal of Economics and Finance*, *5*(4), 71–80.

Kiranmai, J., dan Swetha, C. (2018). Green Accounting Practices: An Overview †., *IUP Journal of Business Strategy*, Vol. 15 No. 3, 7–18.

Kusuma, G. I., Suhadak, dan Ari, Z. (2019). Analisis Pengaruh Profitabilitas (Profitability) dan Tingkat Pertumbuhan (Growth) Terhadap Struktur Modal dan Nilai Perusahaan (Dtudi pada Perusahaan Real Estate And Property yang terdaftar di Bursa Efek Indonesia (bei) Periode 2007-2011). 1, pp. 1–15.

Kridhangkara, W. (2019). *143 Anak Mati Sia-Sia di Lubang Tambang*. Retrieved from https://m.solopos.com/143-anak-mati-sia-sia-di-lubang-tambang-979216?doing_wp_cron=1579783008.0260329246520996093750

Landi, G., & Mauro, S. (2019). Towards A More Ethical Market: The Impact Of ESG Rating On Corporate Financial Performance, *Social Responsibility Journal, 15*(1), 11–27.

Lasmana, A., & Ashariah F. (2019). Prediksi *Return* Saham pada Perusahaan Sektor Pertambangan yang Terdaftar di Bursa Efek Indonesia, *Jurnal Akunida*, *5*(1), 24–37.

Manzoor Kokab. (2018, 7 Juni). *Pooled Data vs Panel Data* [Video]. YouTube. https://www.youtube.com/watch?v=68N2ELPsZ80

Mardiana, I. A., & Wuryani, E. (2019). Pengaruh Kinerja Lingkungan Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagi Variable Pemoderasi. *AKUNESA: Jurnal Akuntansi Unesa*, *8*(1), 1–7.

Mohammadi., M. A. D., Mardani, A., Khan, M. N. A. A., & Streimikiene, D. (2018). Corporate sustainability disclosure and market valuation in a Middle Eastern Nation: evidence from listed firms on the Tehran Stock Exchange: sensitive industries versus non-sensitive industries. *Economic Research-Ekonomska Istrazivanja* , *31*(1), 1488–1511. https://doi.org/10.1080/1331677X.2018.1486722

Narullia, D., & Subroto, B. (2018). Value Relevance of Accounting Information and Corporate Social Responsibility in Indonesia and Singapore. *Jurnal Aplikasi Manajemen*, *16*(1), 9–19. https://doi.org/10.21776/ub.jam.2018.016.01.02

Nasieku, T., & Memba, F. (2018). Corporate Social Responsibility Disclosure and the Value Relevance of Annual Reports for Listed Banks in Kenya. *European Scientific Journal, 14*(4), pp. 329–349. https://doi.org/10.19044/esj.2018.v14n4p329

Sarumpaet et al. (2017). The Value Relevance Of Environmental Performance : Evidence From Indonesia, *Social Responsibility Journal, 13*(4), 817–827.

Palepu, K. G., Paul M. Healy., & Peek, E. (2013). *Business Analysis and Valuation : IFRS Edition* (Third Edit). Andrew Ashwin.

Permatasari, F., & Widianingsih, P. (2020). Pengungkapan Corporate Social Responsibility terhadap Kinerja Keuangan dengan Good Corporate Governance sebagai Variabel Moderasi. *Media Akuntansi dan Perpajakan Indonesia, 1*(2), 1–22.

Rahayu, S.W., & Sugianto, F. (2020). Implikasi Kebijakan dan Diskriminasi Pelarangan Ekspor dan Minyak Kelapa Sawit dan Bijih Nikel Terhadap Perekonomian Indonesia, *Jurnal Ilmu Hukum*, *16*(2), 224–236.

Redaktur. (2017). *Ini Pandangan Pakar CSR Unpad Soal Urgensi Proper Bagi Perusahan*. Retrieved from https://www.dunia-energi.com/ini-pandangan-pakar-csr-unpad-soal-urgensi-proper-bagi-perusahaan/

Rusmana, Y. (2019). *Penyebab dan Penanganan Karhutla Tahun 2019 di Indonesia*. Retrieved from https://www.matamatapolitik.com/penyebab-dan-penanganan-karhutla-tahun-2019-di-indonesia-analisis/

Saha, et al. (2019). Research on Social and Environmental Accounting: Current Trends and Future Approaches, *Indonesian Journal of Sustainability Accounting and Management*, *3*(2), 119–136

Satrio, D., & Kunto, S. (2020). Relationship Between Eco-Efficiency On Firm Value Moderated With Profitability And Leverage, *Jurnal Ekonomi Dan Bisnis*, *3*(1), 242–251.

Sembiring, C. L. (2017). Manajemen Laba dan Pengungkapan Tanggung Jawab

Sosial Perusahaan dengan Komisaris Independendan Kepemilikan Institusional sebagai Variabel Pemoderasi.,Jurnal Berkala Akuntansi Dan Keuangan Indonesia, Vol. 2 No. 1, pp. 20–41. https://e-journal.unair.ac.id/BAKI/article/view/3544

Sudoni, H., Suminartika, E., & Emah. (2019). Faktor-faktor yang Memengaruhi Harga Saham PT London Sumatra Indonesia Tbk, *Jurnal Agribisnis dan Sosial Ekonomi Pertanian UNPAD*, Vol. 4 No. 2, pp. 37–47.

Sulistiawati, E., & Dirgantari, N. (2016). Analisis Pengaruh Penerapan Green Accounting Terhadap Profitabilitas Pada Perusahaan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia, *Jurnal Reviu Akuntansi dan Keuangan*, *6*(1), 865–872

Teja, I. G. M. A. A., Wahyuni, M. A., & Dewi, G. A. K. R. S. (2018). Pengaruh Environmental Performance, Social Performance Dan Penerapan Carbon Management Accounting Terhadap Indeks Harga Saham (Studi Empiris Pada Perusahaan Manufaktur Dan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2017), *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha*, *9*(3), 122–133.

Toppinen, A., & Korhonen-Kurki, K. (2013). Global Reporting Initiative And Social Impact in Managing Corporate Responsibility: Case Studies of Three Multinational Companies in the Forestry Industry, Business Ethics, Vol. 22 No. 2, p. 202–217. https://doi.org/10.1111/beer.12016

Utomo, A. S. (2019). The Effect of CSR, ROI, ROE on Stock Prices in Manufacturing Companies Listed on the Indonesia Stock Exchange, PETA Journal, Vol. 4 No. 1, p. 82–94.