

ENVIRONMENT SOCIAL GOVERNANCE AND ACCOUNTING INFORMATION VALUE RELEVANCE IN INDONESIA

Clarissa Dominique Effendi Handajani, Yie Ke Feliana, Rizky Eriandani*

Universitas Surabaya, Indonesia

Corresponding Email: rizky.eriandani@staff.ubaya.ac.id

ABSTRACT

value relevance of earnings has decreased. In addition, ESG (Environmental, Social, and Governmental) issues and the achievement of the triple bottom line have become a major focus. Therefore, this study examines the role of ESG and its component on enhancing value relevance of accounting information, especially on EPS and BVPS. This study's sample consists of 244 companies that were listed on the IDX (Indonesia Stock Exchange) between 2017 and 2021 and have ESG data on Bloomberg. By using multiple linear regression, it is found that ESG variable and all of its component are significant. Therefore, company should focus on ESG (Environmental, Social, and Governmental) issues in addition to accounting information as investors consider these factors when making decisions.

Keywords: Accounting information, BVPS (Book Value per Share), EPS (Earning per Share), ESG (Environmental, Social, Governance), Value relevance

INTRODUCTION

Barth et al., (2023) suggest that there is a decrease in value relevance of EPS while the relevance of BVPS and other information are increasing. Meanwhile, various facts have shown an increase in public attention to ESG issues as outlined in the triple bottom line. This issue has also address in Indonesia that enhance by several facts. These facts include increase of \$71.1 Billion of ESG funding by 2020 (Díaz et al., 2021); Indonesia get the highest rating out of 27 countries that gain public trust in disclosing sustainability reports (Wuryasti, 2020); and also, the obligation to report sustainability reports in Indonesia based on Keuangan (2016); Otoritas Jasa Keuangan, (2021).

Miralles-Quirós et al. (2018); Mohammad & Wasiuzzaman (2021); Yoon et al. (2018) found that ESG positively correlated with firm value because it can represent long-term earnings. However, Narullia & Subroto (2018); Serafeim & Yoon (2021); Wong & Zhang (2021) found the opposite. ESG disclosure on various media channels and ESG score has prompted to have negative relationship with stock prices. Furthermore, Narullia & Subroto (2018) has an opposite findings within the fact that ESG does not directly affect stock values and it is irrelevant in Indonesia. However, the irrelevancy of ESG in Indonesian markets are because of the quality and comparability of the sustainability report are deficient.

In contrast, Amrousy et al. (2012) found no difference in market reaction between companies with high and low ESG scores. Diverse reactions to ESG issues on global markets are primarily due to investors' varying emphasis on ESG factors. (Han et al., 2016) discovered that the ESG factor has a unique relationship with firm performance. Environmental score has a negative correlation with firm performance, while social score has no correlation and governance score has a positive correlation. Furthermore, Miralles-Quirós et al. (2018) demonstrate contradictory results in which all ESG factors have a positive relationship with stock prices.

Although the relevancy of ESG is still unclear, however Narullia & Subroto (2018) state that non-financial information can increase firm value which increase the relevance of accounting information. From these facts, this paper aims to have empirical evidence in determining the role of ESG and its components in enhancing value relevance of accounting information, which are EPS and BVPS in Indonesia. The relevancy of these information will be measured by stock prices which shows

how these variables influence decisions in the capital market. Moreover, the decrease in value relevance of earnings and increase in value relevance of BVPS and other information has only been studied in American market by Barth et al. (2023) Therefore, this study will conduct a great information and result towards value relevance of ESG and its components and how these variables could enhance value relevance of EPS and BVPS as accounting information.

THEORY, LITERATURE REVIEW, AND HYPOTHESIS

Value Relevance of Information

Financial reports and sustainability reports published as a concern of good corporate governance. In addition, the information presented in the report can be a signal for investors. However, not all the information presented in the report are relevant as the basis for investors' decisions in the capital market. Therefore, the ability of accounting information to influence stock prices are known as value relevance (Francis & Schipper, 1999).

Barth et al. (2023) found a deterioration in the value relevance of earnings per share (EPS) and book value per share (BVPS) as well as an increase in the value relevance of R&D, assets, cash flow, etc. In this study, it was found that in the new economy era, investors pay attention to other information, which included non-financial information, especially for loss firms. On the other hand, the value relevance of ESG and its components has not been studied. Therefore, this research will focus on the role of ESG and its components in increasing the value relevance of EPS and BVPS.

Paolone (2020) suggests that there are 2 methods for analyzing value relevance, which are price models and return models. Price models are the method used in Ohlson's (Ohlson, 1995) model to identify the relationship between firm market value which represented in stock prices and various independent variables to be tested. Return models are the models used by Easton et al. (1991) to test value relevance by examine the relationship between returns or changes in stock prices and the various independent variables to be tested. Return model is a collaboration of the book valuation model and the earning valuation model.

The difference between these 2 methods is that the return model does not analyze the relationship between market value and book value. In conclusion, this model is more suitable for measuring firm performance than market value. However, this study focusses on examining the role of ESG and its components in enhancing value relevance of accounting information in influencing stock prices. Therefore, the model's used is price models.

Hypothesis Development

When making decisions, investors require relevant information, including non-financial data. ESG (Environmental, social, governance) has emerged as an effective way to demonstrate a company's commitment to achieve triple bottom line and sustaining growth. Therefore, ESG-related information should be disclosed in the company's platform, including annual reports and sustainability reports. Good ESG scores are associated with a positive image, which increases the value and competitive advantages of a company. Connelly et al. (2011) stated that information which reliable to investor will become a good signal.

Mohammad & Wasiuzzaman (2021); Yoon et al. (2018); and Miralles-Quirós *et al.* (2018) has proved that ESG is relevant and could increase the firm value in various countries, such as Malaysia, Korea, and Brazil. On the other hand, it does not go well in Indonesia whereas Narullia & Subroto (2018) found that ESG does not directly affect stock values and cannot enhance the relevance of accounting information. However, this research was conducted in 2013-2015 when ESG was not a societal concern and sustainability reports were still incomparable and unstandardized, resulting in

investors receiving irrelevant information. Therefore, the current relevance of ESG in Indonesia has not yet been examined.

To get the result, this research will examine the impact of ESG on the relevance of accounting information. ESG would be measured by ESG score from Bloomberg. While EPS and BVPS will become a proxy to the accounting information. Furthermore, Miralles-Quirós *et al.* (2018) found that all ESG components have a positive relationship with stock prices. Therefore, the relationship between each ESG component and the overall ESG combination on the relevance of accounting information will be examined in this paper. However, Kovács & Sharkey (Kovács & Sharkey, 2014) stated that signal can be manipulated by credible signaler. Therefore, this study also examines the difference of market reaction toward good performers and bad performers. Thus, the hypothesis proposed are:

H1: ESG enhance value relevance of accounting information

H2a: Environmental performance enhance value relevance of accounting information

H2b: Social performance enhance value relevance of accounting information

H2c: Governance performance enhance value relevance of accounting information

RESEARCH METHODS

The unit of analysis used in this research is a company that has been listed on the Indonesia Stock Exchange in 2017-2021 which have ESG scores on Bloomberg. Researcher used non-probability sampling with a purposive technique in determining the sample. There are six criteria for sample selection. First, the company has an ESG score in Bloomberg. Second, closing date December, 31. Third, presenting Rupiah as monetary unit. Fourth, the company has stock price on Yahoo Finance. Based on these criteria obtained 244 for model 1 and 235 for model 2.

In order to examine the value relevance of EPS and BVPS due to the disclosure of ESG and digitalization, this research conduct 2 models which modified Ohlson (OHLSON, 1995) model. The first model will analyze the role of ESG in increasing the relevance of accounting information. The second model is used to examine the role of each ESG components in increasing the relevance of accounting information.

$$MV_{it} = \alpha_0 + \alpha_1 EPS_{it} + \alpha_2 BVPS_{it} + \alpha_3 ESGS_{it} + \alpha_4 EPS_{it} * ESGS_{it} + \alpha_5 BVPS_{it} * ESGS_{it} + \alpha_6 OCF_{it} + \alpha_7 ROA_{it} + \alpha_8 SIZE_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

$$MV_{it} = \alpha_0 + \alpha_1 EPS_{it} + \alpha_2 BVPS_{it} + \alpha_3 ES_{it} + \alpha_4 SS_{it} + \alpha_5 GS_{it} + \alpha_6 EPS_{it} * ES_{it} + \alpha_7 EPS_{it} * SS_{it} + \alpha_8 EPS_{it} * GS_{it} + \alpha_9 BVPS_{it} * ES_{it} + \alpha_{10} BVPS_{it} * SS_{it} + \alpha_{11} BVPS_{it} * GS_{it} + \alpha_{12} OCF_{it} + \alpha_{13} ROA_{it} + \alpha_{14} SIZE_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

Whereas, MV_{it} = Market price of shares taken at the closing price at the end of the financial year of company i on year t; EPS_{it} = Earning per share of company i on year t; $BVPS_{it}$ = Book value per share of company i on year t; $ESGS_{it}$ = ESG Score of company i on year t; ES_{it} = Environmental Score of company i on year t; SS_{it} = Social Score of company i on year t; GS_{it} = Governance Score of company i on year t; $Size_{it}$ = Size that calculated from log total asset of company i on year t; OCF_{it} = Operating

cash flow divided by total asset of company i on year t ; ROA_{it} = Return on Assets of company i on year t ; ε_{it} = Error.

The measurement of those variables is shown on table 1.

Table 1. Variable Operationalization

Types	Variables	Formula
Dependent Variables	Market Value (MV)	Closing market price at the end of the year from Yahoo Finance
Independent Variables	Earnings per Share (EPS)	$EPS = \frac{Net\ Income - Preferred\ Dividends}{Weighted\ Average\ Shares\ Outstanding}$
	Book Value per Share (BVPS)	$BVPS = \frac{Total\ Common\ SE - Preferred\ Stock}{Number\ of\ Common\ Shares}$
Independent and Moderating Variables	ESG Score, Environmental Score (ES), Social Score (SS), Governance Score (GS)	Measured by Bloomberg whereas: Environmental scores are measured by carbon emissions, climate change effects, pollution, waste disposal, renewable energy, and resource depletion Social scores are measured by supply chain, discrimination, political contributions, diversity, human right, and community relations Governance scores are measured by Cummulative Voting, Executive Compensation, Shareholders' Right, Takeover Defense, Staggered Boards, and Independent Directors
	SIZE	$Size = Log (total\ aset)$
Control Variables	Operating Cash Flow (OCF)	$OCF = \frac{(NI + Changes\ in\ Assets\ and\ Liabilities + Non\ cash\ Exp. - Increase\ in\ Working\ Capital)}{Total\ Asset}$
	Return on Assets (ROA)	$ROA = \frac{Net\ Income}{Average\ Total\ Assets}$

RESULTS AND DISCUSSION

Based on 244 data for model 1 and 235 data for model 2, table 2 shows the descriptive statistics of both model's variables.

Table 2. Descriptive Statistics of Model 1 and 2

Panel A: Model 1 (ESG)					
Variabel	N	Minimum	Maximum	Mean	Std. Deviation
MV	244	50.00	49,568.61	3,061.20	5,237.25
EPS	244	-661.05	5,655.00	241.08	576.48
BVPS	244	0.00	31,294.49	791.48	4,424.53
ESGS	244	0.00	61.92	34.98	14.59
OCF	244	-0.14	3.93	0.10	0.27
ROA	244	-0.22	0.37	0.06	0.09
SIZE	244	7.34	15.24	13.29	1.45
Panel B: Model 2 (ES. SS. GS)					
Variabel	N	Minimum	Maximum	Mean	Std. Deviation
MV	235	50.00	75,611.33	3,047.45	7,698.55
EPS	235	-661.05	5,655.00	272.70	744.055
BVPS	235	0.00	31,294.49	810.53	4,507.68
ES	235	0.00	92.42	27.59	25.18
SS	235	0.00	87.67	28.24	16.60
GS	235	0.0006	95.00	68.55	16.32
OCF	235	-0.14	3.93	0.10	0.28
ROA	235	-0.22	0.45	0.06	0.09

SIZE	235	7.34	15.24	13.27	1.43
------	-----	------	-------	-------	------

Both of 2 models shows that the models are fit. It is concluded due to the adjusted R square of these models are above 90% (model 1: 92.3%; model 2: 97.1) and F value are significant at 0.000. This means the models had explained more than 90% of the variance in the data and there is significant effect of the independent variable and the control variable on stock price as its dependent variable. Moreover, the t test result on table 5 shows that ESG and its components are significant which shows that its variables are value relevance. However, ES had a negative correlation with MV that means higher ES score will result on lower MV.

Though, it is proven that non-financial information is also significant other than accounting information for investor’s decision on capital market. On the other hand, the role of ESG and its components to enhance value relevance of accounting information are not likely to be significant. Therefore, a further discussion is needed toward its impact on accounting information.

Table 3. Regression Result

Panel A: Model 1 (ESG)			
Variable	B	t	Sig. (1-tailed)
(Constant)	-4,343.66	-4.45	0.00
EPS	16.07	22.96	0.00
BVPS	0.11	2.37	0.009
ESG	51.50	6.62	0.00
EPS*ESGS	-0.23	-11.24	0.00
BVPS*ESGS	-0.001	-1.15	0.13
OCF	81.64	0.21	0.42
ROA	1,395.51	1.06	0.15
SIZE	269.32	3.89	0.00
F	363,625		
Fsig	0.000		
Adj. R ²	0,923		

Discussion

Table 3 shows that the independent variables in the form of EPS, BVPS, and ESGS have a significant positive influence on share prices as the dependent variable. This is because the significance value of the t-test is 0.000 (<0.05). Furthermore, the EPS*ESGS variable has a significance of 0.000 (<0.05). Even so, the t-test results caused EPS, which initially influenced share prices positively, to become negative. This indicates that ESGS cannot increase the value relevance of EPS. Table 3 also shows that the BVPS significance value increased from 0.009 to 0.13. Furthermore, the interaction between ESGS and BVPS causes the results of the BVPS t-test, which initially influenced stock prices positively, to become negative. Therefore, ESGS cannot increase the value relevance of accounting, so H1 is rejected.

Table 4 shows that SS and GS have a significant positive impact on market value, whereas ES has a negative impact. Therefore, ESGS and its component are relevant information for making a decision in capital market, whether it drives to positive or negative stock prices. Moreover, EPS and BVPS as an accounting information used in this study has shown different effect. Based on table 4, it was found that EPS has a significant positive effect on stock prices. However, BVPS does not always affect stock prices significantly. BVPS has a significant positive effect on stock prices on model 1. Meanwhile in models 2, BVPS does not significantly affect stock prices. The insignificant effect of BVPS toward stock price will affect the role of the ESG and its component as moderating variables in increasing the value relevance of EPS and BVPS.

Table 4. Regression Result

Panel D: Model 2 (ESG Components)			
Variable	B	t	Sig. (1-tailed)
(Constant)	-4,206.26	-4.12	0.00
EPS	10.70	9.10	0.00
BVPS	1.83	1.18	0.12
ES	-15.61	-4.09	0.00
SS	4434	7.69	0.00
GS	23.25	3.88	0.00
EPS*ES	0.14	32.44	0.00
EPS*SS	-0.41	-25.11	0.00
EPS*GS	0.03	1.39	0.08
BVPS*ES	-0.004	-1.78	0.04
BVPS*SS	0.002	0.34	0.37
BVPS*GS	-0.02	-1.15	0.13
OCF	872.65	2.50	0.007
ROA	2,217.91	1.92	0.03
SIZE	206.06	3.16	0.001
F	569,280		
Fsig	0.000		
Adj. R ²	0,971		

Moderating the ES variable with EPS produces a significance value of 0.000, indicating that the interaction effect between ES and EPS can increase share prices. On the other hand, moderating the ES variable with BVPS produces a negative significance value of 0.038 (<0.05). On the other hand, empirical results show that the interaction between BVPS and ES causes negative results. Indicates that ES cannot increase the value relevance of BVPS. Therefore, H2a is only accepted for EPS. The interaction effect between the SS and EPS variables produces a significance value of 0.00 (<0.05), indicating that SS influences stock prices significantly. Even so, the results of the interaction effect between EPS and SS cause the EPS variable, which initially had a positive influence on market value, to change to a negative influence. Then, the moderation of the SS variable with BVPS empirically shows that it is insignificant. So, H2b is rejected. The moderating effect of the GS variable with EPS on MV is insignificant for both EPS and BVPS, so H2c is rejected.

FINDINGS AND CONCLUSION

Hypothesis 1: The Role of ESG in Enhancing Value Relevance of EPS and BVPS

The purpose of Hypothesis 1 is to establish the role of ESGs in enhancing the value relevance of accounting information, which are EPS and BVPS. The results of t-test indicate that ESGs can significantly impact stock prices. Therefore, it can be concluded that ESGs is applicable in Indonesia. This result is consistent with findings from previous studies (Miralles-Quirós et al., 2018; Mohammad & Wasiuzzaman, 2021; Yoon et al., 2018).

However, ESGs could not enhance value relevance of accounting information, neither EPS nor BVPS. This supported previous research by Narulia & Subroto (2018b) who also found that ESG could not increase the value relevance of EPS or BVPS. ESG could not increase the relevancy of accounting information because good ESG rating indicates environmental costs incurred by the company which will reduce company's profit and enterprise value (Song et al., 2017; Voinea et al., 2020). Moreover, the implementation of ESG have not efficient yet due to the obligation to publish sustainability report for most company in Indonesia are started in 2021.

Hypothesis 2: The Role of ESG Components in Enhancing Value Relevance of EPS and BVPS

While ESGS could not enhance value relevance of accounting information, interaction of accounting information with ESG components could make a different result. Hypothesis 2 aims to determine the role of the ESGS component in increasing the value relevance of accounting information, which are EPS and BVPS. This test also aims to determine the most impactful ESG components in increasing the value relevance of accounting information. Hopefully, companies can determine the right sustainability strategy in increasing the relevance of the accounting information presented.

ES, SS, and GS independently influence stock prices significantly. Therefore, it is also possible to conclude that these three variables have value relevance. Nonetheless, ES has a negative effect on stock prices, whereas SS and GS have a positive effect. These results are in line with the research of Zuraida et al. (2014) who found that social as measured by social disclosure score value relevance and Han et al. (2016) who found that environment has a negative relationship and governance has a positive relationship to firm performance.

Through the regression results, it can be concluded that ES, SS, and GS affect EPS and BVPS in different directions. ES as EPS moderator can increase EPS value relevance. However, the interaction effect between BVPS and ES is negative significant. This means that eventhough these two variables are relevant, ES could not enhance value relevance of BVPS.

However, the inconsistency is because of the insignificant of BVPS and the awareness of environmental issue has not been a prioritize for the sample in this research. (Sarumpaet et al. (2016) also found that a significant positive relationship between ES and MV was only found in good performers. However, due to the lack of urgency to have a good ESG score, categorizing the samples based on positive and negative EPS still not provide significant results for all moderating variables. For company which has positive EPS, ES and GS can increase the relevance of EPS to company earnings, while SS cannot increase the relevance of accounting information, both EPS and BVPS. The findings that ES can enhance value relevance of EPS in good performers are same as for all sample.

However, a new finding for GS that can enhance value relevance of accounting information for good performers. GS, which are also good corporate governance are highly related to EPS. It is because companies with higher GS means that the companies are accountable and responsible. This has shown a goodwill which can enhance value relevance of EPS. Moreover, EPS is directly related to economic performance which are profits, while BVPS is only related to equity that makes ES does not directly affect BVPS (Sarumpaet et al., 2016).

Furthermore, from the company that has negative EPS, it was found that all interactions did not produce a significant correlation, except for the interaction with GS. However, GS is not able to increase the relevance of accounting information, both EPS and BVPS. On the other hand, SS causes an insignificant relationship to stock prices. This causes SS cannot increase the value relevance of EPS. Furthermore, GS cannot increase the value relevance of EPS. Moreover, the moderation of SS and GS with BVPS causes an insignificant relationship to stock prices. Therefore, ES, SS, and GS cannot increase the value relevance of BVPS.

Furthermore, the inconsistency of the role of ES, SS, and GS in increasing the value relevance of accounting information has indicated that the ESG component has no definite relationship in increasing the value relevance of accounting information. This erratic direction can be caused by the difference in perspective between investors. On the other hand, these three components should also be carried out simultaneously by the company to fulfill 3BL aspects. Veverková (2020) stated that 66% agree that ESG is important. However, the components of the ESG cannot 'work' by themselves. This indicates that a company cannot have a good firm value if it only pays attention to one of them. Therefore, the ES, SS and GS components cannot individually increase the value relevance of accounting information, both EPS and BVPS. However, it is proven that ES can increase the value

relevance of EPS which means that during 2017-2021, investor see ES and EPS as relevant information in making decision.

IMPLICATIONS, LIMITATIONS AND SUGGESTIONS

This study aims to examine whether ESG and its components can enhance value relevance of accounting information, which are EPS and BVPS. By examining companies listed on Indonesia Stock Exchange (IDX) 2017-2021 which has ESG score on Bloomberg, it is found that ESG and its components are relevant in Indonesia. However, the lack urgency toward ESG issues has make ESG and its components could not enhance value relevance of accounting information.

Having a high ESG score is associated with an increase in ESG costs, which will directly reduce the return on investment. Therefore, businesses should enhance the efficacy of ESG practices to increase the relevance of accounting data. Moreover, despite the fact that this study demonstrates that ESG cannot improve the value relevance of accounting information, companies should prioritize ESG issues. Since 2021, all companies listed on the IDX have been subject to an increasing ESG obligation. Furthermore, having a good ESG score can increase the value relevance of EPS for poor performers, implying that every company should focus on ESG issues.

This study has limitations because the sample selection is restricted to companies that have been listed on the IDX and have a ESG score on Bloomberg within the past five years (2017-2021). Bloomberg's ESG score was required to have dependable sources for ESG calculation. In addition, the study is conducted at a time when the majority of companies have not yet given ESG a high priority. However, it would be interesting to discuss this topic in a future study where ESG has become a primary concern for company sustainability and has been effectively implemented.

Due to the limitations of this study, the authors make the following suggestions for future research: (1) Collect more information about company ESG activity when ESG has become a primary concern for companies and when most companies have achieved efficiency. Since 2021, all IDX-listed companies are required to comply with ESG standards, which are just beginning to emerge as a trend. Therefore, additional research is required within the next few years to obtain more relevant results; (2) Use another country as a benchmark to determine whether ESG and its components can improve the value relevance of accounting information; (3) Include other moderating variables, such as accrual earnings management and GCG pillars, which are also a current issue influencing the value relevance of accounting information.

Reference

- Amrousy, Z., Gavius, I., Katz, H., & Yosef, R. (2012). Corporate Social Responsibility (CSR) and Firm Performance. *Journal of Modern Accounting and Auditing*, 8(11), 1691–1703.
- Barth, M. E., Li, K., & McClure, C. G. (2023). Evolution in value relevance of accounting information. *The Accounting Review*, 98(1), 1–28.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.
- Díaz, V., Ibrushi, D., & Zhao, J. (2021). Reconsidering systematic factors during the Covid-19 pandemic – The rising importance of ESG. *Finance Research Letters*, 38(October 2020), 101870. <https://doi.org/10.1016/j.frl.2020.101870>
- Easton, P. D., Harris, T. S., & Harrist, T. S. (1991). Earnings As an Explanatory Variable for Returns. *Source: Journal of Accounting Research*, 29(1), 19–36.
- Francis, J., & Schipper, K. (1999). Have Financial Statements Lost Their Relevance? *Source: Journal of Accounting Research*, 37(2), 319–352.

- Han, J.-J., Kim, H. J., & Yu, J. (2016a). Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian Journal of Sustainability and Social Responsibility*, 1(1), 61–76. <https://doi.org/10.1186/s41180-016-0002-3>
- Han, J.-J., Kim, H. J., & Yu, J. (2016b). Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian Journal of Sustainability and Social Responsibility*, 1(1), 61–76. <https://doi.org/10.1186/s41180-016-0002-3>
- Keuangan, O. J. (2016). *Undang-Undang No. 40 Tahun 2007 Tentang Perseroan Terbatas*. Retrieved from Sustainable Finance: <http://www.ojk.go.id/sustainable>
- Kovács, B., & Sharkey, A. J. (2014). The Paradox of Publicity: How Awards Can Negatively Affect the Evaluation of Quality. *Administrative Science Quarterly*, 59(1), 1–33. <https://doi.org/10.1177/0001839214523602>
- Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Gonçalves, L. M. V. (2018). The value relevance of environmental, social, and governance performance: The Brazilian case. *Sustainability (Switzerland)*, 10(3). <https://doi.org/10.3390/su10030574>
- Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Valente Gonçalves, L. M. (2018). The value relevance of environmental, social, and governance performance: The Brazilian case. *Sustainability*, 10(3), 574.
- Mohammad, W. M. W., & Wasiuzzaman, S. (2021a). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, 2, 100015.
- Mohammad, W. M. W., & Wasiuzzaman, S. (2021b). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, 2, 100015.
- Mohammad, W. M. W., & Wasiuzzaman, S. (2021c). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, 2. <https://doi.org/10.1016/j.cesys.2021.100015>
- Narullia, D., & Subroto, B. (2018a). Value Relevance of Accounting Information and Corporate Social Responsibility in Indonesia and Singapore. *Journal of Applied Management*, 16(1), 9–19. <https://doi.org/10.21776/ub.jam.2018.016>
- Narullia, D., & Subroto, B. (2018b). Value Relevance of Accounting Information and Corporate Social Responsibility in Indonesia and Singapore. *Journal of Applied Management*, 16. <https://doi.org/10.21776/ub.jam.2018.016>
- OHLSON, J. A. (1995a). Earnings, Book Values, and Dividends in Equity Valuation. *Contemporary Accounting Research*, 11(2), 661–687. <https://doi.org/10.1111/j.1911-3846.1995.tb00461.x>
- OHLSON, J. A. (1995b). Earnings, Book Values, and Dividends in Equity Valuation. *Contemporary Accounting Research*, 11(2), 661–687. <https://doi.org/10.1111/j.1911-3846.1995.tb00461.x>
- Otoritas Jasa Keuangan. (2021). *SURAT EDARAN OTORITAS JASA KEUANGAN REPUBLIK INDONESIA NOMOR 16 /SEOJK.04/2021 TENTANG BENTUK DAN ISI LAPORAN TAHUNAN EMITEN ATAU PERUSAHAAN PUBLIK*.
- Paolone, F. (2020). *Accounting, Cash Flow and Value Relevance*. *PERATURAN OTORITAS JASA KEUANGAN NOMOR 51 /POJK.03/2017TENTANG PENERAPAN KEUANGAN BERKELANJUTAN BAGI LEMBAGA JASA KEUANGAN, EMITEN, DAN PERUSAHAAN PUBLIK*. (n.d.).
- Sarumpaet, S., Nelwan, M., & Nirmala Dewi, D. (2016a). *The Value Relevance of Environmental Performance The Value Relevance Of Environmental Performance: Evidence From Indonesia*.

- Sarumpaet, S., Nelwan, M., & Nirmala Dewi, D. (2016b). *The Value Relevance of Environmental Performance The Value Relevance Of Environmental Performance: Evidence From Indonesia*.
- Serafeim, G., & Yoon, A. (2021). *Stock Price Reactions to ESG News: The Role of ESG Ratings and Disagreement*.
- Song, H., Zhao, C., & Zeng, J. (2017). Can environmental management improve financial performance: An empirical study of A-shares listed companies in China. *Journal of Cleaner Production*, 141, 1051–1056. <https://doi.org/10.1016/j.jclepro.2016.09.105>
- Veveřková, K. (2020). *The importance of investing in the environment and corporate governance in the private sector is getting into swing – dReport*.
- Voinea, C. L., Hoogenberg, B. J., Fratostiteanu, C., & Hashmi, H. B. A. (2020). The relation between environmental management systems and environmental and financial performance in emerging economies. *Sustainability (Switzerland)*, 12(13), 5309–5330. <https://doi.org/10.3390/su12135309>
- Wong, J. B., & Zhang, Q. (2021). Stock market reactions to adverse ESG disclosure via media channels. *British Accounting Review*, 54(1), 101045. <https://doi.org/10.1016/j.bar.2021.101045>
- Wuryasti, F. (2020, October). *Indonesia Peringkat Tertinggi Keterbukaan Laporan Keberlanjutan*.
- Yoon, B., Lee, J. H., & Byun, R. (2018a). Does ESG performance enhance firm value? Evidence from Korea. *Sustainability*, 10(10), 3635. <https://doi.org/https://doi.org/10.3390/su10103635>
- Yoon, B., Lee, J. H., & Byun, R. (2018b). Does ESG performance enhance firm value? Evidence from Korea. *Sustainability*, 10(10), 3635. <https://doi.org/https://doi.org/10.3390/su10103635>
- Yoon, B., Lee, J. H., & Byun, R. (2018c). Does ESG performance enhance firm value? Evidence from Korea. *Sustainability (Switzerland)*, 10(10). <https://doi.org/10.3390/su10103635>
- Zuraida, Z., Houqe, N., & Van Zijl, T. (2014). *Value Relevance of Environmental, Social and Governance Disclosure*.