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Quantitative Assessment of ESG Impact on Firm Value: Study on ESG Leader Index 2021–2023

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ABSTRACT

The goals of this research are: 1) Being aware of how environmental affect the firm value enterprises included in the 2021-2023 ESG Leader index, 2) Being aware of how social affect the firm value enterprises included in the 2021-2023 ESG Leader index, 3) Being aware of how governance affect the firm value enterprises included in the 2021-2023 ESG Leader index. Company value is one aspect that can be influenced by environmental, social, governance. Through a quantitative approach, using a purposive sampling technique, this study selected 18 company's as a sample from the population of 44 company's that were part of ESG Leader index 2021-2023. According to the research social and governance factors significantly positive on firm value, whereas environmental factors significantly negative on firm value. In order to boost stakeholder's trust, company's that have the incorporated ESG elements can provide sustainability reports accurately and be verified for correctness.

Keywords : Environmental, Social, Governance, Firm Value.

INTRODUCTION

In today's modern era, society phase many environmental and social. The main environmental problem currently being phase by society globally is global warming. According to *BMKG* (2021), occurs due to greenhouse gases emissions, where this emissions are mainly triggered by human activities. The increase in greenhouse gases was announced by *BMKG* in 2021 which discussed the condition of greenhouse gas emissions in 2004-2021. Global warming has increased public awareness of the importance of preserving the environment and increased efficiency towards social responsibility. With the existence of social awareness in the community, in addition to affecting their daily lives, it can also affect the way they invest. Investors who initially only considered the aspect of financial returns when investing now they also consider how a company's responsibility towards environmental.

Based on Goodstats (2024), state that from 2015 to 2023 men's wages are always higher than woman's. This gap occurs due to employment discrimination. With this salary gap, companies are expected to be able consider their responsibilities towards social aspects, because this aspect is also a concern in the eyes of stakeholders, especially investors.

On the other hand, many corruption cases in Indonesia. This is proven in the table presented by Databoks. Based on Databoks (2024), state that the corruption cases by sector in Indonesia reached 791 cases. The high number of corruption cases is a form of company failure in its governance. Investors are increasingly considering how companies are responsible for aspects of their governance, because of the increase in corruption cases in Indonesia. Takin from the previously provided statistics, it can be inferred that investors now take into account not just financial factors but also the duty of the company's to environmental, social, dan governance.

Environmental, Social, and Governance (ESG) is a standard for companies in carrying out investment practices. Companies that successfully implement best practices for the environment and social directly make the company contribute to minimizing carbon emissions and pollution (Imron & Taswiyah, 2022). This is in line with Indonesia's ongoing efforts to tackle global warming, which in turn can influence the decisions of today's investors who consider ESG.

Practices that pay attention to ESG aspects in various companies have become a trend among investors, making the growth of environmentally friendly investments increase every year. According to Databoks (2021), state that ESG investments are increasing from year to year even though in 2021 there was a decline. The increased publish awareness of environmental and social issues is the reason behind ESG.

The Indonesia Stock Exchange (IDX) has also taken various actions to support the implementation of Environmental, Social, and Governance (ESG) practices in each company so that they are carried out properly. One of the actions taken by the IDX is to launch the IDX ESG Leader Index or ESG Leader Index in 2020 (CNBC Indonesia, 2020). The existence of this index is a form of IDX appreciation for companies that have a high commitment to ESG implementation. Companies that are members of this index generally have a good reputation and public trust, so that in the end they have the opportunity to increase firm value.

According to Yulianto (2020), Firm value is the investor's view of a company. The firm value reflects how investors assess the company's performance and opportunities in the future based on various aspects, one of which is the aspect of applying ESG principles which is the current trend. Delvina & Hidayah (2023) state that the application of ESG principles in the firm is the right strategy, because in addition to improving the company's good image, it can also have a positive impact on the firm’s value in the eyes of investors.

Findings of earlier studies that look at how ESG affects firm value are not entirely consistent. In their study, Christy & Sofie (2023) found that while governance has a positive and significant impact on company value, then environmental and social does not. According to Melinda & Wardani (2020), there is a good correlation between environmental, social, and governance. Additionally, according to study by Hariyanto & Ghozali (2024), the environment and governance disclosure scores have no significantly on company value, however the social disclosure score has a positive and significantly value on company value.

The diversity of results in previous studies has encouraged researchers to conduct study with the title is **"The Effect of Environmental, Social, and Governance on Firm Value (Case Study on Companies Listed in the ESG Leader Index for the 2021-2023 Period)".** It is hoped that this study will shed light on how environmental, social, and governance factors impact the firm value, whether it confirm or refutes earlier findings. This research has objectives research, the objectives research is to knowing the effect of environmental, social, ang governance on firm value in companies listed on the ESG Leader index for the 2021-2023 period.

LITERATURE REVIEW

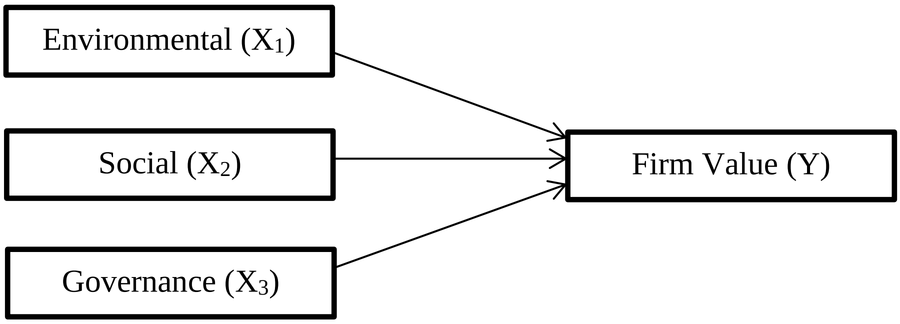
Stakeholder Theory *(Teori Pemangku Kepentingan)*

Freeman & McVea first put forth the stakeholder theory in 1984. This theory clarifies business ethics and management that discusses aspects of managing an organization, it is essential to benefits the company’s stakeholders in the company's. The stakeholder theory includes all people who have an interest in an organization, not just owners or investors (Donaldson & Preston, 1995). In this context, ESG has an important role as a form of providing benefits by the company to stakeholders. The existence of good ESG implementation in the company’s indicates it is concern for environmental, social, and governance responsibility. Based on this theory, a company that manages the implementation and disclosure of ESG properly will have a positive impact on the company's reputation and the level of trust of stakeholders.

Signal Theory *(Teori Sinyal)*

Signal Theory, coined by Spence in 1973, it's a theory that clarifies the location of the signal sender (company) gives a signal to the signal receiver (stakeholder). The signal in this case is intended to convey a certain message from the signal sender (company) to the signal receiver (stakeholder). With the delivery of the message, it is expected to provide a view of the company to external parties and the business market. According to Gumanti (2009) in Safriani & Utomo (2020), states that the purpose of signaling is to announce something that can ultimately change the view of external parties towards the company. Therefore, the signals conveyed by the company must be strong and can change the views of external parties when assessing the company. In this theory, ESG can be used as a signal by the company. With the implementation of good and appropriate ESG practices, the company seems to send a signal to stakeholders through the company's ESG disclosure, the signal can attract the attention of stakeholders, especially investors.

Conceptual Framework



According to conceptual framework above, the researchers make a hypothesis as follow :

H_1 : The value of firm is positively impacted by the environmental
H_2 : The value of firm is positively impacted by the social
H_3 : The value of firm is positively impacted by the governance

RESEARCH METHODS

Type, Location, and Time of Study

In this study, quantitative correlational method are being used. According to Sugiyono (2019) state that Correlational quantitative research is a type of research that characterizes the problem as a correlational relationship between two or more variables. This research was conducted on the Indonesia Stock Exchange (IDX) website and the company's personal website. The time used by researchers to conduct research is from December 2024 to January 2025.

Population and Sample

The population used in this study are companies listed in the ESG Leader index for the period 2021 to 2023. Purposive sampling techniques were utilized to choose the study sample. This is a sampling method that takes specific factors into account. The following are the relevant sample criteria:

1. Company's that have been include on ESG Leader index from 2021 to 2023 consecutively.
2. Company's that make complete publications related to research variable data on companies listed in the ESG Leader index in 2021-2023.

Definition of Operational Variables

1. Environmental; Environmental disclosure (X_1) is calculated by dividing the number of environmental indicators in the sustainability report by the number of environmental aspects module of the GRI series 300. Then the measurement formula is as follows:

$$X_1 = \frac{\text{Number of company disclosure items}}{\text{Total GRI disclosure standard items}}$$

2. Social; Social disclosure (X_2) is calculated by dividing the number of social indicators in the sustainability report by the number of social aspects module of the GRI series 400. Then the measurement formula is as follows:

$$X_2 = \frac{\text{Number of company disclosure items}}{\text{Total GRI disclosure standard items}}$$

3. Governance; Governance disclosure (X_3) is calculated by dividing the number of governance indicators in the sustainability report by the number of governance aspects module of the GRI series 100, 2, and 3. Then the measurement formula is as follows:

$$X_3 = \frac{\text{Number of company disclosure items}}{\text{Total GRI disclosure standard items}}$$

4. Firm Value; Tobin's Q ratio is used to measure firm value (Y) using the formula below:

$$Y = \frac{\text{Market value equity + Book value liabilities}}{\text{Book value of assets}}$$

Data Collection Sources and Methods

The financial and sustainability reports that serve as the study data sources provide quantitative secondary data in the form numerical values. Secondary data for this study comes from financial and sustainability reports released by companies included in the ESG Leader index for the years 2021-2023. Since this study use secondary data documentation that is, data collected from recording sources or other publications is the approach used to obtain the data.

RESEARCH FOUNDS AND DISCUSSION

Descriptive Statistical Test Founds

	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value	54	0,511	3,285	1,30339	0,515389
Environmental	54	0,188	0,969	0,46141	0,189213
Social	54	0,250	0,900	0,47407	0,136323
Governance	54	0,407	1,000	0,86665	0,167238
Valid N (listwise)	54				

Data source: Output SPSS

The picture shows that there are 54 samples, throughout the entire 2021-2023 observation period. The firm value variable has a mean of 1,30339 and a standard deviation pf 0,515389. Then, 3,285 is the maximal value and 0,511 is the minimum value. The standard deviation of the environmental variable was 0,189213, and mean value was 0,46141. 0,969 and 0,188 are the maximum and minimum value. Social variable had a maximum value of 0,900 and a minimum value of 0,250, with the mean value of 0,47407 and standard deviation 0,136323. The last variable is governance, had a mean value of 0,86665 and a standard deviation of 0,167238 with the maximum and minimum value is 1,000 and 0,407.

Normality Test Results

		Unstandardized Residual
N		52
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	0,36907243
Most Extreme Differences	Absolute	0,064
	Positive	0,064
	Negative	-0,040
Test Statistic		0,064
Asymp. Sig. (2-tailed)[c]		0,200[d]

Data source: Output SPSS

Based on the picture above, that the results of normality test using the Kolmogorov-Smirnov test show the residual variable have a significance value of 0,200 > 0,05 indicates the residual variable data is normally distributed.

Classical Assumption Test Results

1. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	Environmental	0,616	1,624
	Social	0,585	1,709
	Governance	0,860	1,162
a. Dependent Variable: Firm Value			

Data source: Output SPSS

Based on picture, the environmental variable show that all variables have tolerance's value is < 0,10 and VIF value all variable's have a value <10, indicate no multicollinearity.

2. Heteroscedasticity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,475	0,174		2,726	0,009
	Environmental	-0,167	0,208	-0,142	-0,801	0,427
	Social	-0,259	0,296	-0,159	-0,876	0,386
	Governance	-0,020	0,202	-0,015	0,099	0,922
a. Dependent Variable: ABS						

Data source: Output SPSS

Based on picture above, show all variables in this study has significant value > 0,05, indicate no heteroscedasticity.

3. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,464[a]	0,215	0,166	0,38043	1,717
a. Predictors: (Constant), Governance, Environmental, Social					
b. Dependent Variable: Firm Value					

Data source: Output SPSS

Based on picture above, Durbin-Watson value obtained from the autocorrelation test is 1,717. This study uses a sample size (N) of 52, and there are 3 independent variables (k). The sample and independent variables provide a dU value according to the Durbin-Watson table of 1,6769. The dU value of (1,6769) < DW value of (1,717) < 4-dU (2,3231) is met, indicate that not autocorrelation in regression model of this study.

Multiple Linear Regression Analyze Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5,312E-16	0,127		0,000	1,000
	Environmental	-0,431	0,163	-0,431	-2,643	0,011
	Social	0,365	0,167	0,365	2,185	0,034
	Governance	0,294	0,138	0,294	2,130	0,038
a. Dependent Variable: Firm Value						

Data source: Output SPSS

Based on the picture above, the linear regression equation obtained is as follows:

$$Y = -5{,}312E\text{-}16 - 0{,}431\ (\text{Sig. } 0{,}011) + 0{,}365\ (\text{Sig. } 0{,}034) + 0{,}294\ (\text{Sig. } 0{,}038) + \varepsilon$$

Hypothesis Test Analysis Results

1. Model Test (F Test) Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,970	3	3,657	4,385	0,008[b]
	Residual	40,030	48	0,834		
	Total	51,000	51			
a. Dependent Variable: Firm Value						
b. Predictors: (Constant), Governance, Environmental, Social						

Data source: Output SPSS

The ANOVA test results showed that f value of 4,389 and with significance value is < 0,05, indicate the regression model feasible to used in this research.

2. Coefficient of Determination (Adjusted R^2) Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,464[a]	0,215	0,166	0,91321
a. Predictors: (Constant), Governance, Environmental, Social				
b. Dependent Variable: Firm Value				

Data source: Output SPSS

The R square (Adjusted R^2) have a value of 0,215. The value means 21,5% of dependent variable, namely firm value, the independent variables can provide an explanation, namely environmental, social, and governance. While the remaining 78,5% of the dependent variable is impacted by the additionals variables outside of this study model.

3. Partial Test Founds (t Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5,312E-16	0,127		0,000	1,000
	Environmental	-0,431	0,163	-0,431	-2,643	0,011
	Social	0,365	0,167	0,365	2,185	0,034
	Governance	0,294	0,138	0,294	2,130	0,038
a. Dependent Variable: Firm Value						

Data source: Output SPSS

1. The impact of environmental on the firm value

According on this research, the environmental variable have a t value of -2,643 and the significantly value is 0,011 < 0,05, indicate that H^1 is rejected. The t test tabel indicate that the environmental have a significant negative impact on the firm value. This results show high environmental disclosure actually makes the company value decrease, research on firm in Indonesia show that shareholders perceive management to be more focused on environmental practise than optimizing firm value (Husada & Handayani, 2021). This is relate with the study carried out from Aydogmus et al (2022) in this research of Hariyanto & Ghozali (2024), which states the environmental requires higher cost with the long period of the time to obtain benefits, so that stakeholder do not pay much attention to environmental disclosure. The found of study carried out from Johan & Toti (2022), in they study found that environmental have negative influence on the firm value.

2. The impact of social on the firm value

Social variable have t value of 2,185 and the significant value is 0,034<0,05, this value indicate that H^2 is accepted. The t tes table indicate the social have a significant positive impact on the firm value. This results indicate that high social disclosure increases the firm value. The founds of this research are also supported from Suretno et al (2022), which states that a social disclosure have a significantly positive influence on the firm value.

3. The impact of governance on the firm value

   Based on the table partial test, governance variable have t value of 2,130 and the significantly value is 0,038<0,05, indicate that H^3 is accepted. t test table indicate the governance have a significantly positive influence on the firm value. The high governance disclosure will make increase the firm value. The founds on this study also supported from Kaplale et al (2023), the research are states that the disclosure governance have significant positive impact on the firm value.

CONCLUSIONS, AND SUGGESTIONS

Conclusions

1. Environmental have a significantly negative impact on value are firms included in ESG Leader index in current period, namely 2021-2023. This shows that increase or decrease on environmental aspects will influence the firms value.
2. Social have a significantly positive impact on the value of firms include in ESG Leader index in current period, namely 2021-2023. This shows that a increase or decrease in a social aspects will influence firms value.
3. Governance has significantly positive impact on value of firms listed in the ESG Leader index in the current period, namely 2021-2023. This shows that an increase or decrease in a governance aspect will influence the firms value.

Limitations

1. The sample used only focuses on companies that are consecutively listed in ESG Leader index in 2021-2023 period.
2. Observation period is still short, namely for 3 years (2021-2023), so it does not yet reflect the situation in the long term.
3. The contribution independent variables are still low on explained dependent variables.

Suggestions

1. Future study expected to used of the wider number of samples on the study, increase the research period, use other variables related to ESG and firm value. The addition aims to make the research conducted can provide broader information.
2. Companies that have implemented environmental, social and governance aspects in their sustainability reports, it is hoped that the data presented regarding the application of ESG is accurate and can be checked for accuracy.

BIBLIOGRAPHY

Badan Meteorologi, Klimatologi, dan Geofisika. (2021). *Buletin Gas Rumah Kaca*. Vol-01 No-01. Dari website BMKG. https://iklim.bmkg.go.id/publikasi-klimat/ftp/buletin/2021/BULETIN%20GAS%20RUMAH%20KACA%20Vol-01%20No-01.pdf. Diakses pada 1 November, 2024

CNBC Indonesia TV, (2020). *BEI Resmi Luncurkan Indeks IDX ESG Leader*. Dari website CNBC Indonesia. https://www.cnbcindonesia.com/market/20201223112301-19-211134/bei-resmi-luncurkan-indeks-idx-esg-leaders . Diakses pada 6 November, 2024

Christy, E & Sofie. (2023). *Pengaruh Pengungkapan Environmental, Social, dan Governance Terhadap Nilai Perusahaan*. Trisakti Economic Journal, 3(2), 3899-3908. https://doi.org/10.25105/jet.v3i2.18233

Delvina, E. M., & Hidayah, R. (2023). *The Effect of ESG (environmental, social and governance) Performance on Company Value and Company Performance*. Management Studies and Entrepreneurship Journal (MSEJ), 4(5), 5436-5444. https://doi.org/10.37385/msej.v4i5.2903

Donaldson, T., & Preston, L. E. (1995). *The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications*. The Academy of Management Review, 20(1), 65 https://doi.org/10.5465/amr.1995.9503271992

Ghozali, I. (2021). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 26 Edisi 10*. Badan Penerbit Universitas Diponegoro

GoodStats. (n.d.). *Potret kesenjangan gender di Indonesia: Upah pekerja perempuan 17% lebih rendah dari laki-laki.* (2024). https://data.goodstats.id/statistic/potret-kesenjangan-gender-di-indonesia-upah-pekerja-perempuan-17-lebih-rendah-dari-laki-laki-KxpbG. Diakses pada 20 Januari, 2025

Hariyanto, D. B., & Ghozali, I. (2024). *Pengaruh Environment, Social, dan Governance (ESG) Disclosure Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan yang Terdaftar dalam Indeks Kompas 100 Periode 2020-2022)*. Diponegoro Journal of Accounting, 13(3). https://ejournal3.undip.ac.id/index.php/accounting/article/view/46057

Husada, E.V, & Handayani, S. (2021). *Pengaruh pengungkapan ESG Terhadap Kinerja Keuangan Perusahaan (Studi Empiris Pada Perusahaan Sektor Keuangan Yang Terdaftar Di Bei Periode 2017-2019), Jurnal Bina Akuntansi*, 8 (2), 122-144. https://doi.org/10.52859/jba.v8i2.173

Imron, A., & Taswiyah, T. (2022). *Green Human Resource Management dalam Dunia Industri (Kajian Empiris dan Teoritis dalam Implementasi Green Hrm)*. Journal of Research Innovation, 3(6), 6799-6806. https://doi.org/10.47492/jip.v3i6.2147

Johan & Toti, G. K. (2022). *The Effect of Environmental, Social, Governance (ESG) Disclosure on Company's Profitability & Value in the SRI-KEHATI INDEX 2015-2020. Business & Management Research Media*, 22(1), 35-48. https://e-journal.trisakti.ac.id/index.php/mrbm/issue/view/1033

Kaplale, Y. S., Murni, Y., & Ani, S. M. (2023). *Pengaruh Environmental Disclosure, Social Disclosure dan Mekanisme Governance Terhadap Nilai Peruahaan (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2018-2020). Jurnal Ilmiah Administrasi Publik*, 3 (2), 163-177. https://doi.org/10.35814/jiap.v3i2.4033

Katadata. (2023). *Ada 791 kasus korupsi di Indonesia pada 2023, terbanyak di desa*, dari website databoks. https://databoks.katadata.co.id/ekonomi-makro/statistik/517494e433c6cdf/ada-791-kasus-korupsi-di-indonesia-pada-2023-terbanyak-di-desa. Diakses pada 20 Januari, 2025

Katadata. (n.d). *Ini Tren Investasi ESG di Indonesia Sampai 2021*, dari website databoks. https://databoks.katadata.co.id/pasar/statistik/86e36051a02353c/ini-tren-investasi-esg-di-indonesia-sampai-2021. Diakses pada 6 November, 2024

Melinda, A., & Wardhani, R. (2020). *The Effect of Environmental, Social, Governance, and Controversies on Firms' Value: Evidence from Asia.* 27, 147-173. https://doi.org/10.1108/S1571-038620200000027011

Safriani, M. N., & Utomo, D. C. (2020). *Pengaruh environmental, social, governance (ESG) disclosure terhadap kinerja perusahaan*. *Diponegoro Journal of Accounting*, *9*(3). https://ejournal3.undip.ac.id/index.php/accounting/article/view/29093

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan Rnd*. Penerbit Alfabeta Bandung

Suretno, F., Adrianto, F., & Alfarisi, M. F. (2022*). Effect of Environment, Social and Governance Disclosure on Firm Value. JBTI: Journal of Business: Theory and Implementation*, 13(2), 121-128. https://doi.org/10.18196/jbti.v13i2.14458

Yulianto, W. (2020). *Analisis Faktor-Faktor yang Mempengaruhi Nilai Perusahaan. Jurnal Paradigma Akuntansi*, 2(2), 576-585