Environmental, Social and Governance Score on Market Capitalization in Association of Southeast Asian Nations Countries

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Abstract: This research aims to determine the influence of E Score, S Score, and G Score on Market Capitalization values in ASEAN countries. The population of this study was 4591 companies. The sampling technique uses Simple Random Sampling, where we take a random sample of companies with a total of 49 companies. The data analysis technique uses multiple linear regression. The results of the analysis prove that there is an influence of E, S, and G Score together on market capitalization. However, partially only the E score has an influence on Market Capitalization, while the S and G Scores have no effect on market capitalization

Keyword : E Score, S Score, G Score, Market Capitalization

INTRODUNTION

The value of a company is one of the important considerations for an investor to determine whether to buy company shares or not [1]. The better the

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[1] Amalia Siti Khodijah. "The Influence of Environmental, Social, and Governance Performance on Foreign Investment." *Journal of Accounting and Investment* 24, no. 1 (2022): 64–83. https://doi.org/10.18196/jai.v24i1.16033.

company's financial performance, the greater the investor's desire to invest, and vice versa. One of investors' considerations in evaluating a company's financial performance is by assessing the company's *Environmental, Social and Governance* (ESG) Score [2]. Investors are interested in investing in companies that have good ESG performance and this will increase the value of the company itself [3].

Environmental, Social, and Governance (ESG) is a development of the concept of *corporate social responsibility* (CSR) which provides indicators of corporate responsibility to all *stake holders* consisting of shareholders, employees, customers, government, competitors, and the environment. The concept of CSR was first introduced by Howard R. Bowen in 1953, this led to him being nicknamed " *The Father's of Corporate Social Responsibility* " or Father of CSR [4]. Companies' attention to disclosure of environmental, social and corporate governance performance has become a concern for companies in the last few decades [5]. The results of research conducted by researchers through ESG refinitiv, researchers found that of the many companies that have gone public, only a few companies have carried out ESG rankings, more details are presented in Table 2 below:

Table 2
Companies in ASEAN Countries that Conduct ESG Ratings

No	Country name	Go-public company	Companies that carry out ESG ratings
1	Indonesia	891	79
2	Malaysia	1049	335
3	Philippines	260	30
4	Singapore	644	74
5.	Thailand	882	156

[2] Imlak Shaikh, "Environmental, Social, and Governance (Esg) Practice and Firm Performance: An International Evidence." *Journal of Business Economics and Management* 23, no. 1 (2021): 218–37. https://doi.org/10.3846/jbem.2022.16202.

[3] Susanne Arvidsson and John Dumay, "Corporate ESG Reporting Quantity, Quality and Performance: Where to Now for Environmental Policy and Practice?," *Business Strategy and the Environment* 31, no. 3 (2022): 1091–1110, https://doi.org/10.1002/bse.2937.

[4] Dwikartini, *Corporate Social Responsibility (Transformasi Sustainability Management Dan Implementasi Di Indonesia)*. Edited by Wildan. Edisi Revi. Refika, 2020

[5] Thi Hong Van Hoang, Wojciech Przychodzen, Justyna Przychodzen, and Elysé A Segbotangni. "Does It Pay to Be Green? A Disaggregated Analysis of U.S. Firms with Green Patents." *Business Strategy and the Environment* 29, no. 3 (2020): 1331–61. https://doi.org/10.1002/bse.2437.

6.	Vietnamese	864	24	
7.	Cambocha	1	1	
8	Brunei Darussalam	0	0	
9.	Laos	0	0	
10	Myanmar	0	0	
11	Timor Leste	0	0	Source:

Revinitiv ESG, Accessed November 14, 2023

Based on data that researchers found, for Indonesia, of the 891 registered companies, only 79 companies carried out ESG rankings. In Malaysia, out of 1049 companies, only 336 companies carry out ESG ranking. In the Philippines, of the 260 companies that *have gone public,* only 31 companies carry out ESG ratings. Several previous studies others prove that ESG Performance companies influence firm value, such as research conducted by Wong with the research title *Does ESG certification add firm value?* [6]. This finding is supported by the results of research conducted by Aldowaish [7] and Bualay [8]. However, the findings of this study contradict the results of research conducted by Safriani & Utomo. The results of their research state that ESG performance has no impact on the company's corporate value [9] As stated in the background above, the title of this research is This research examines the influence of E Score, S Score, G

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[6] Woei Chyuan Wong, Jonathan A. Batten, Abd Halim Ahmad, Shamsul Bahrain Mohamed-Arshad, Sabariah Nordin, and Azira Abdul Adzis. "Does ESG Certification Add Firm Value?" *Finance Research Letters* 39 (2021): 101593. https://doi.org/10.1016/j.frl.2020.101593.

[7] Alaa Aldowaish, Jiro Kokuryo, Othman Almazyad, and Hoe Chin Goi. "Environmental, Social, and Governance Integration into the Business Model: Literature Review and Research Agenda." *Sustainability (Switzerland)* 14, no. 5 (2022). https://doi.org/10.3390/su14052959.

[8] Amina Buallay, "Management of Environmental Quality: An International Journal Is Sustainability Reporting (ESG) Associated with Performance? Evidence from the European Banking Sector." *Management of Environmental Quality: An International Journal* 30, no. 1 (2019): 98–115. https://doi.org/10.1108/MEQ-12-2017-0149.

[9] Maulida Nur Safriani and Dwi Cahyo Utomo, "Pengaruh Environmental, Social, Governance (Esg) Disclosure Terhadap Kinerja Perusahaan," *Diponegoro Journal of Accounting* 9, no. 3 (2020): 1–11.

Score. This research seeks to test the E Score, S Score, G Score on market capitalization.[10]

Formulation of the problem

Based on the background above, the formulation of the problem to be solved in this research is:

(1) Does the E Score affect market capitalization?
(2) Does the S Score affect market capitalization?
(3) Does the G Score affect market capitalization?
(4) Do E, S, and G Score influence market capitalization together?

Research purposes

This research has a series of objectives that represent the formulation of the problem to be solved in the research , namely;

(1) To analyze the influence of E Score on market capitalization
(2) To analyze the influence of S Score on market capitalization
(3) To analyze the influence of G Score on market capitalization
(4) To analyze the influence of E, S , and G Score on market capitalization

THEORETICAL BASIS

Environmental, Social and Governance (ESG)

Over the last two decades, disclosure of sustainability reports has developed greatly throughout the world and continues to increase in number. Environmental, Social, and Governance (ESG) is a term generally used in a company's Corporate Social Responsibility (CSR) which is disclosed in its sustainability report. Shareholders pay more attention to the sustainability of a company which can be proven by ESG in the sustainability report (Connelly, 2011). The right solution to reduce conflict in this agency is to have managerial ownership in good corporate governance.

Market Capitalization

Market Capitalization shows the comparison of the company's market value with the number of shares outstanding. Many previous studies have also used Market Capitalization value as a proxy for company value, such as research by Passos (2023) and Chouaibi (2022). There is a formula for measuring *Market Capitalization value* is :

Market Capitalization = Harga Pasar x Jumlah saham yang beredar

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[10] Safriani, Maulida Nur, and Dwi Cahyo Utomo. "Pengaruh Environmental, Social, Governance (Esg) Disclosure Terhadap Kinerja Perusahaan." *Diponegoro Journal of Accounting* 9, no. 3 (2020): 1–11.

Previous research

Before the researcher conducted the research, there were several previous researchers who conducted research with the same theme, some of these researchers are depicted in the table below :

Table 2
Previous research

No	Name	variable x	variable y	results	test equipment	range
1	Mahmut Aydogmus¸G¨uz han G¨ulay, Korkmaz Ergun (2022)	*E Score, S Score* and *G Score*	ROA, Tobin Q	E No, ESG affects ROA and Tb Q	SPSS	Türkiye
2	Salim Chouaibi and Jamel Chouaibi *2022	ESG Score, industry type	Tobin Q	ESG influences Tobin Q	Stata	UK and Germany
3	Adrian Gawęda 2022	*ESG Score* and ESG combination, *firm size* , roa, DR	Tobin Q	ESG influences Tobin Q	STATA	Italy
4	ESG and Firm Value.2022	ROE, CR, *Quick ratio , Stock price*	ESG	ROE, CR, *The quick ratio* influences *Stock Price*	spss	Italy
5	Kemal CEK, Serife Eyupoglu (2020)	ESG	economics	ESG influences *economic growth*	SEM	UK
6	Wan Masliza Wan Mohammad and Shaista	ESG Score, ROI and Capital	Tobin Q	ESG Score and ROI influenc	Eviews	Malaysia

	Wasiuzzaman. (2021)			e Tobin Q		
7	Xie, Jun and Nozawa 2017	*Escore, SScore* and G Score, CEO , and Audit committee	ROA, TobinQ	ESG, CEO and *Audite* influenc e ROA and Tobin	DEA	Japan
8	Xiaoling Yu and Kaitian Xiao (2022)	ESG Scores	Tobin Q and ROA	ESG influenc es ROA and Tobin	2 panel data	China
9	Eva KarKasari, Subur Karyatun, and Kumba Digdowiseiso (2022)	ROA, CR, DER	PER	ROA, CR, DER influenc e PER	SPSS	Indones ia
10	Ahmad, Muslim and Syahrah (2021)	ROE, ROE CR, TATTOO	PBV	ROE, ROE CR, TATO influenc e PBV	spss	Indones ia
11	Shijie Ma (2023)	ESG Score, donation	Stock Price	*ESG Score* , donatio ns have an influenc e on *Stock Price*	CAPM	China
12	Jihye Yun and Jonghwa Lee (2022)	ESG	ROA, ROE , ROS	ESG influenc es ROA, ROE and ROS	NMF_mm multiplicati ve update method	Korea

RESEARCH METHODOLOGY

A. Population

This research examines companies in ASEAN countries including Indonesia, Malaysia, Singapore, the Philippines, Thailand and Cambodia. The total number of companies in the country is 4591 companies. The sampling technique uses Simple Random Sampling, where we take a random sample of companies with a total of 49 companies.

B. Data analysis technique

The data analysis technique used in this research is multiple linear regression analysis. Researchers tested the influence of E Score, S Score, and G Score on Market Capitalization both simultaneously and partially. The regression equation is:

Y = a + Bx1 + B X2 + X3

Y = Market Capitalization

X1 = E Score

X2 = S Score

X3= G Score

Results and Discussion

A. Descriptive Analysis

The descriptive analysis test is a test carried out to obtain a picture of the research object as a whole. The objects to be described in this research are E Score, S Score and G Score. The descriptive analysis in this research is illustrated in the research below ;

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ESCore	49	.0	89.0	38,571	24.2496
SScore	49	15.0	98.0	52,082	21.2209
GScore	49	12.00	94.00	45.9388	21.54879
M. Cap	49	67.00	1.34E5	1.9271E4	34542.55496
Valid N (listwise)	49				

In the descriptive statistical table above, we can see that the N value is 49, which shows that the total objects of this research are 49 companies. The minimum E Score of 0.0 means that in the research period there was an E Score value of 0 and that was the smallest value. Maximum for E Score is 89, which means the highest E Score value is 89 with a mean of 38.57.

The minimum S Score value is 15, which means the smallest value for this variable is 15. Maximum 98 means the largest value for the S Score in the research period is 98. The mean (average) score is 52.08. For the G Score value, the minimum value is 12, meaning the lowest value for the G score is 12, Maximum 94 means the highest value is 94 and the average or mean is 45.93, and the average for the G Score is 45.9. The minimum Market Capitalization value is 67, meaning the smallest value is 67, the maximum or largest value is 1,340,000. average/mean 192,400

B. Normality test

The normality test was carried out to ensure that the data for the research period was normally distributed or could be used. Data is said to be normal if it has a significance value > 0.05. The results of the normality test in this study can be seen in the table below:

Table 4

One-Sample Kolmogorov-Smirnov Test

		ESCore	SScore	GScore	M. Cap	Ln_MCap
N		49	49	49	49	49
Normal Parameters [a]	Mean	38,571	52,082	45.9388	1.9271E4	8.1201
	Std. Deviation	24.2496	21.2209	2.15488E1	3.45426E4	2.09557
Most Extreme Differences	Absolute	,110	.102	,171	,289	,079
	Positive	,110	.102	,171	,289	,079
	Negative	-.081	-.073	-.105	-.289	-.071
Kolmogorov-Smirnov Z		,768	,716	1,197	2,026	,551
Asymp. Sig. (2-tailed)		,597	,685	.114	,001	,922
a. Test distribution is Normal.						

In the table above, it can be seen that the Sg (2-tailed) value for the E Score variable is 0.597, S Score 0.685, G Score 0.114 and Market Capitalization 0.992. All these values are > 0.05. This means that all data used in this research is normally distributed.

C. Multicollinearity Test

The multilinearity test aims to test whether the regression model finds a correlation between independent variables. A good regression model should have no correlation between independent variables. If independent variables are correlated with each other, then these variables are not orthogonal.[11]

The Multicollinearity test can be seen from (1) the *tolerance value* and its opposite (2) *the variance* inflation *factor* (VIF). These two measures show which independent variable each other independent variable explains)[12] (Ghazali, 2007: 95) If the t *tolerance value* is >0.1 and the VIF value is <10 then the research conducted does not contain multicollinearity in the data. The results of the multicollinearity test are in the table below :

Table 5

Coefficients ᵃ

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	5,233	,679		7,707	,000	3,866	6,601		
ESCore	,035	.014	.401	2,560	.014	,007	,062	,546	1,830
SScore	,026	.016	,268	1,697	,097	-.005	,058	,538	1,859
GScore	,004	.014	,039	,262	,795	-.025	.033	,605	1,654

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[11] Imam Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26 Edisi 10*. (Badan Penerbit Universitas Diponegoro, 2021) h. 97
[12] Imam Ghozali, h. 95

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a. Dependent Variable:
Ln_MCap

In table 5 above, it can be seen that the Tolerance value for the E Score is 0.546 >0.1 and the VIF is 1.830 <10 which indicates that there is no multicollinearity for the E Score variable. Likewise, the tolerance value for S Score is 0.538 and VIF 1.859, and the Tolerance value for G Score is 0.605 and VIF 1.654, meaning that both the S Score and G Score variables are proven to not have multicollinearity.
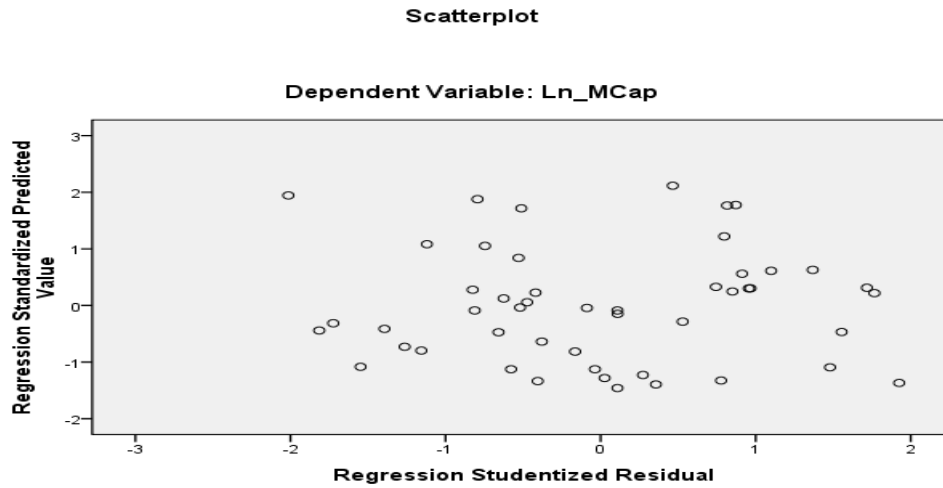
D. Heteroscedasticity Test

The heteroscedasticity test aims to test whether the regression model has an inequality of variance from the residuals of one observation to another. If the points are spread randomly and spread both above and below the number 0 on the Y axis, then it can be concluded that there is no heteroscedasticity in the regression model used. In the graph of the SPSS output results above, it can be seen that the points are spread randomly and are spread both above and below the number 0 on the Y axis, so it can be concluded that in this study there was no heteroscedasticity in the regression model used. [13]The results of the heteroscedasticity test can be seen in the table in the image below

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[13] Imam Ghozali, Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26 Edisi 10. (Badan Penerbit Universitas Diponegoro, 2021) h. 97

Figure 1

In the Scaterplot image above, it can be seen that the points are spread above the 0 line and below the 0 line. This confirms that the data passes the Heteroscedasticity test.

E. Coefficient of Determination Test

The coefficient of determination is used to test the goodness-of-fit of the regression model. This test is described from the R^2 value. The R^2 value can be seen in the table below.

Table 6

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,630 [a]	,398	,357	1.67993	,398	9,897	3	45	,000	1,153

a. Predictors: (Constant), GScore, ESCore, SScore

b. Dependent Variable: Ln_MCap

In the table above, it can be seen that the R2 value is 0.398 , which means that the independent variables, namely E Score, S, Score and G Score, can

explain Market Capitalization by 39.8%, while the remaining 60.2% is explained by other variables not included in this research.

F. F test

The simultaneous influence test is used to find out whether the independent variables jointly or simultaneously influence the dependent variable. If the significance value is <0.05 then there is a simultaneous influence of the independent variable on the dependent variable and the research can continue. Meanwhile, if the significance value is >0.05 then there is no simultaneous influence of the independent variable on the dependent variable, so the research cannot continue. The results of the F test can be seen in the table below

Table 7

ANOVA [b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83,790	3	27,930	9,897	,000 [a]
	Residual	126,997	45	2,822		
	Total	210,788	48			

a. Predictors: (Constant), GScore, EScore, SScore

b. Dependent Variable: Ln_MCap

In the Anova table above, you can see a significance value of 0.000, which means that there is a joint influence between E Score, G Score and G Score on Market Capitalization.

G. t test

The partial test is used to determine the effect of each independent variable on the dependent variable. If the significance value is <0.05 then there is a simultaneous influence of the independent variable on the dependent variable. Meanwhile, if the significance value is > 0.05 then there is no simultaneous influence of the independent variable on the dependent variable.

Table 8

Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	5,233	,679		7,707	,000	3,866	6,601		
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GScore	,004	.014	,039	,262	,795	-.025	.033	,605	1,654

a. Dependent Variable:
Ln_MCap

In the table above, it can be seen that the significance value for the E Score is 0.014, where the value is <0.05, meaning that there is an influence between the E Score and Market Capitalization. The S Score is 0.097 and the G Score is 0.795, all of these values are above 0.05, which means there is no influence of the S Score or G Score on Market Capitalization.

The results of this research prove that the E Score, which describes a company's social responsibility to the environment, has a large influence on the value of the company. Therefore, it is important for a company to pay more attention to corporate responsibility towards the social environment and society.

Conclusion

Through hypothesis testing, we can draw the following conclusions from the results of this research: (1) E Score influences Market Capitalization, (2) S Score has no effect on Market Capitalization (3) G Score has no effect on Market Capitalization (4) E, S and G Score jointly influence Market Capitalization

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