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## The Influence of Environmental, Social, and Governance (ESG) Implementation on Corporate Cost of Capital With Financial Performance as A Moderating Variable (A Case Study on Companies in ASEAN)

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### Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh kinerja Environmental, Social, and Governance (ESG) terhadap biaya modal (WACC), serta pengaruh kinerja keuangan perusahaan (ROA) sebagai variabel moderasi, pada perusahaan yang terdaftar di bursa. bursa di negara-negara ASEAN pada tahun 2018 hingga 2022. Penelitian ini menggunakan data sekunder yang diperoleh dari The London Stock Exchange Group (LSEG). Sampel penelitian diperoleh melalui purposive sampling dengan kriteria yang telah ditentukan, sehingga menghasilkan sampel sebanyak 1.161 titik data observasi. Teknik analisis data yang digunakan meliputi statistik deskriptif, uji asumsi klasik, dan analisis regresi berganda menggunakan Eviews 12. Hasil penelitian menunjukkan bahwa kinerja sosial mempunyai pengaruh positif signifikan terhadap biaya modal; kinerja lingkungan, jika dimoderasi oleh kinerja keuangan perusahaan, mempunyai dampak positif yang signifikan terhadap biaya modal; dan kinerja sosial, jika dimoderasi oleh kinerja keuangan perusahaan, mempunyai dampak negatif yang signifikan terhadap biaya modal. Sedangkan variabel kinerja lingkungan dan tata kelola tidak berpengaruh terhadap biaya modal.

Kata Kunci: *ESG, Kinerja Keuangan, Biaya Modal*

## Abstract

This research aims to analyze the impact of Environmental, Social, and Governance (ESG) performance on the cost of capital (WACC), as well as the influence of the company's financial performance (ROA) as a moderating variable, for companies listed on stock exchanges in ASEAN countries from 2018 to 2022. This study uses secondary data obtained from The London Stock Exchange Group (LSEG). The research sample is obtained through purposive sampling with predefined criteria, resulting in a sample of 1,161 observational data points. The data analysis techniques used include descriptive statistics, classical assumption tests, and multiple regression analysis using Eviews 12. The results of the study show that social performance has a significant positive impact on the cost of capital; environmental performance, when moderated by the company's financial performance, has a significant positive impact on the cost of capital; and social performance, when moderated by the company's financial performance, has a significant negative impact on the cost of capital. Meanwhile, the environmental and governance performance variables do not affect the cost of capital.

Keywords: *ESG, Financial Performance, Cost of Capital*

## INTRODUCTION

Nowadays, the disclosure of non-financial factors related to Environmental, Social, and Governance (ESG) is gaining special attention worldwide. This trend began to rise after the publication by the Global Reporting Initiatives (GRI) in 2001, which introduced disclosures related to Corporate Social Responsibility (CSR). In 2015, the United Nations established the Sustainable Development Goals (SDG), focusing on sustainable development with the ultimate goal of preserving resources for the future, mitigating climate change, and reducing global poverty. The SDG concept once again emphasizes the importance of implementing ESG, particularly in business.

The ESG concept consists of three pillars: the environmental pillar, which includes issues like carbon emission reduction, waste management, and energy efficiency; the social pillar, which encompasses labor issues, corporate-community relations, and diversity policies; and lastly, the governance pillar, which covers topics such as management, ownership structure, shareholder rights, business ethics, and board structure. ESG disclosure as a whole plays a vital role in reducing the cost of capital for companies (Ould Daoud Ellili, 2020). Furthermore, Ellili (2020) states that the largest factors affecting the cost of capital are environmental and governance factors.

In the context of ASEAN countries, the development of the ESG concept has not been uniformly applied. Indonesia is among the countries that have fully committed to implementing the ESG concept by encouraging publicly listed companies to gradually submit sustainability reports. This commitment is manifested through the enactment of the

Financial Services Authority Regulation (POJK) No. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. Additionally, the Indonesia Stock Exchange (IDX) has committed to promoting sustainability reporting by targeting that by 2022, all listed companies must issue sustainability reports. The IDX also launched the ESG Leaders stock index on December 14, 2020.

The development of ESG implementation has certainly attracted the attention of researchers such as Ghazali & Zulmaita (2022), Inawati & Rahmawati (2023), Jeanice & Kim (2023), Pambudi et al. (2023), and Putu & Devi (2024). However, there is still no research that uses corporate financial performance as a moderating variable in identifying the relationship between ESG implementation and the cost of capital. A moderating variable can influence the relationship between the dependent and independent variables, as shown by the study of Kumaria Puri (2022), which found that the moderating variable, financial slack, can strengthen the relationship between ESG implementation and corporate financial performance. Moreover, these studies only use samples from companies in specific countries, not from ASEAN countries as a whole.

This research aims to provide empirical evidence for the existing research gap by examining the influence of ESG on the cost of capital, moderated by corporate financial performance in ASEAN. The hypothesis underlying this study is that good Environmental, Social, and Governance scores can lower the cost of capital, and financial performance can strengthen this relationship.

## RESEARCH METHOD

### Type of Research

This study aims to evaluate the impact of ESG on corporate cost of capital with financial performance as the moderating variable. The type of research is quantitative, employing a causal quantitative analysis method to evaluate the relationship between three independent variables, one dependent variable, one moderating variable, and two control variables. In this study, the dependent variable is the cost of capital, while the independent variables are the scores for each ESG aspect. The moderating variable is financial performance, represented by the company's ROA (Return on Assets), and the control variables are company age and company size, represented by total assets.

The data used in this study are secondary data obtained from The London Stock Exchange Group (LSEG) ESG Scores (formerly known as Refinitiv). Financial performance

data were sourced from Yahoo! Finance. These data are then processed into variables used in the study.

The analysis techniques applied include descriptive statistics, classical assumption tests, and multiple regression analysis. The classical assumption tests consist of normality tests, multicollinearity tests, heteroscedasticity tests, and correlation tests. The hypothesis testing, using multiple regression analysis, is carried out with the F-test, T-test, and determination coefficient test. Before these tests, the Chow test, Hausman test, and Lagrange Multiplier (LM) test are conducted to determine the best moderating regression model.

## Population and Sampling Technique

### Population

Population refers to the entire set of elements within the generalization area (Sugiyono, 2022). In this study, the population consists of companies listed on the stock exchanges of each ASEAN country, or ASEAN Exchanges, since 2018.

### Sample

A sample is a part of the population that possesses the same characteristics (Sugiyono, 2022). The sampling method used in this study is purposive sampling, which selects samples based on specific criteria (Sugiyono, 2022). The sample criteria used in this study are companies listed on the stock exchanges of each ASEAN country from 2018 to 2022 and those that have ESG scores available in the LSEG ESG Scores.

## RESULT AND DISCUSSION

### Data Analysis

#### Model Determination

##### 1. Chow Test

Table 1. Chow Test

<i>Effects Test</i>	<i>Statistic</i>	<i>d.f.</i>	<i>Prob.</i>
<i>Cross-section F</i>	6.654104	(416,738)	0.0000
<i>Cross-section Chi-square</i>	1809.207035	416	0.0000

Source: Processed by the researcher

The criteria for the Chow Test are as follows: if the p-value  $> 0.05$ , the model used is the Common Effect Model (CEM). However, if the p-value  $< 0.05$ , the model used is the Fixed Effect Model (FEM). The results of the Chow Test show that the p-value for the Cross-

section F is 0.0000 ( $< 0.05$ ), indicating that the chosen model is the Fixed Effect Model (FEM). To ensure that this is the best model, further testing needs to be conducted, specifically the Hausman Test and/or the Lagrange Multiplier Test.

## 2. Hausman Test

Table 2. Hausman Test

<i>Test Summary</i>	<i>Chi-Sq. Statistic</i>	<i>Chi-Sq. d.f.</i>	<i>Prob.</i>
<i>Cross-section random</i>	40.911361	6	0.0000

Source: Processed by the researcher

The criteria for the Hausman Test are as follows: if the p-value  $> 0.05$ , the model used is the Random Effect Model (REM). However, if the p-value  $< 0.05$ , the model used is the Fixed Effect Model (FEM). The Hausman Test yielded a p-value of 0.0003 ( $< 0.05$ ), indicating that the chosen model is FEM.

## 3. Lagrange Multiplier Test (LM Test)

The Lagrange Multiplier Test does not need to be conducted because the Chow and Hausman Tests have already been performed and yielded consistent results. The results of both tests confirm that the best model to choose is the FEM. Therefore, all subsequent testing will utilize the Fixed Effect Model.

## 4. Descriptive Statistics

Descriptive statistics aim to provide an overview of the data being studied. This overview includes the mean, maximum value, minimum value, and standard deviation. The results of the descriptive statistics for each variable are shown in Table 4 below.

Table 4. Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev.
Cost of Capital (Y)	1161	-3.659293	3.360800	1.940966	0.500147
Environmental Performance (X <sub>1</sub> )	1161	0.120968	95.63049	41.16711	24.23917
Social Performance (X <sub>2</sub> )	1161	5.606222	97.53877	54.06380	20.95159
Governance Performance (X <sub>3</sub> )	1161	2.049550	98.74317	52.62246	21.61322
Financial performance (M)	1161	0.0000666	13.57435	0.080030	0.403561
Company Size (K <sub>1</sub> )	1161	18.14566	35.22819	24.27652	3.945786
Company Age (K <sub>2</sub> )	1161	5.648974	10.66758	8.816743	0.774791

Source: Processed by the researcher

The data in Table 4 includes seven variables with a total sample of 1,161 observations (company-year) over a five-year research period.

For the cost of capital variable (Y), the minimum value is -3.659293 for PMB Technology, while the maximum value is 3.360800 for PT Aneka Tambang. The average value of variable Y is 1.940966 with a standard deviation of 0.500147.

For the environmental performance variable (X1), the minimum value is 0.120968 for PT Media Nusantara Citra, and the maximum value is 95.63049 for Murata MFG Co. Variable X1 has an average value of 41.16711 with a standard deviation of 24.23917.

Next, the social performance variable (X2) has a minimum value of 5.606222 for PT Link Net, and the maximum value is 97.53877 for Nestle (M) Sdn Bhd. The average value of variable X2 is 54.06380 with a standard deviation of 20.95159.

For the governance performance variable (X3), the minimum value is 2.049550 for DFI Retail Group, while the maximum value is 98.74317 for Sime Darby Plantation. The average value for X3 is 52.62246 with a standard deviation of 21.61322.

For the moderating variable, Return on Assets (M), the minimum value is 0.0000666 for YTL Corporation, and the maximum value is 13.57435 for Air Asia X Sdn Bhd. The average value for variable M is 0.080030 with a standard deviation of 0.403561.

Next, for the control variable of company size (K1), the minimum value is 18.14566 for Tafi Industries Berhad, and the maximum value is 35.22819 for PT Bank Mandiri Tbk. The average value for the company size variable is 24.27652 with a standard deviation of 3.945786.

The next control variable is company age (K2), with a minimum value of 5.648974 for Farm Fresh Bhd, and a maximum value of 10.66758 for YTL Corporation. The average value for variable K2 is 8.816743 with a standard deviation of 0.774791.

#### Classical Assumption Test

##### 1. Normality Test

The normality test conducted in this study uses the Jarque-Bera (JB) test. The results of the test are shown in Table 5 below.

Table 5. Normality Test

Information	Jarque Bera	Prob.	Conclusion
Jarque Bera Test	2.625192	0.269121	Data is normally distributed

Source: Processed by the researcher

In the Jarque-Bera normality test, data is considered normal if the probability value exceeds 0.05. In this normality test, 229 outlier data points and incomplete entries were eliminated, reducing the sample size from 1,390 to 1,161. This elimination was necessary because missing data can affect the distribution and, consequently, the normality and hypothesis testing. The results indicate that the model has a Jarque-Bera value of 2.625192 with a probability of 0.269121, which is greater than 0.05. Therefore, it can be concluded that the data used in this study is normally distributed.

## 2. Multicollinearity Test

The multicollinearity test is conducted to examine the correlation among independent variables (Ghozali & Ratmono, 2020). The multicollinearity test can be performed in several ways, including using a correlation matrix among independent variables or using the Tolerance and Variance Inflation Factor (VIF) values. The results of the multicollinearity test are shown in Tables 6 and 7 below.

Table 6. Correlation Matrix

Variable	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	M	K <sub>1</sub>	K <sub>2</sub>
X <sub>1</sub>	1.000000	0.705793	0.327204	-0.025889	0.233084	0.175118
X <sub>2</sub>	0.705793	1.000000	0.399524	-0.056016	0.302639	0.115645
X <sub>3</sub>	0.327204	0.399524	1.000000	-0.022021	0.132828	0.063217
M	-0.025889	-0.056016	-0.022021	1.000000	-0.042041	-0.024031
K <sub>1</sub>	0.233084	0.302639	0.132828	-0.042041	1.000000	0.107983
K <sub>2</sub>	0.175118	0.115645	0.063217	-0.024031	0.107983	1.000000

Source: Processed by researchers

Table 7. VIF calculation

Variable	VIF	Conclusion
X <sub>1</sub>	1.619840	There is no multicollinearity
X <sub>2</sub>	1.568463	There is no multicollinearity
X <sub>3</sub>	1.154843	There is no multicollinearity
M	1.011848	There is no multicollinearity
K <sub>1</sub>	1.373161	There is no multicollinearity
K <sub>2</sub>	1.396462	There is no multicollinearity

Source: Processed by the researcher

Based on the results of the multicollinearity test above, the correlation values among the independent variables range from -0.056016 to 0.705793, with none exceeding 0.90. The

VIF values range from 1.0011848 to 1.619840, with none exceeding 10. Therefore, it can be concluded that there is no multicollinearity among all independent variables.

### 3. Heteroscedasticity Test

The heteroscedasticity test aims to examine whether the residual variance is uniform or not. In this study, the method used to test for heteroscedasticity is the Breusch-Pagan-Godfrey test. The results of the heteroscedasticity test are shown in Table 8 below.

Table 8. Heteroscedasticity Test

Obs*R-squared	Prob.	Conclusion
9.779133	0.1343	There is no heteroscedasticity

Source: Processed by the researcher

Based on the results of the heteroscedasticity test, the research model has a probability value of 0.1343, which is greater than 0.05. Therefore, it can be concluded that there is no heteroscedasticity in the research model.

### 4. Autocorrelation Test

The autocorrelation test is used to examine whether there is a relationship between errors in the current period and those in previous periods in the regression model. The autocorrelation test is conducted using the Durbin-Watson Test (DW), and the results can be seen in Table 9 below.

Table 9. Autocorrelation Test

	N	dU	DW	4-dU	Conclusion
6	1161	1.91180	1.997325	2.0882	There is no autocorrelation

Source: Processed by the researcher

Based on the results of the autocorrelation test, the Durbin-Watson (DW) value is 1.997325, using 6 independent variables and 1,161 samples. The DW value of 1.997325 falls between the values of dU 1.91180 and 4 - dU 2.0882 (satisfying the condition  $dU > d > 4 - dU$ ), thus concluding that there is no autocorrelation in the research model.

### Hypothesis Testing

In hypothesis testing, this study uses the coefficient of determination test, F-test, and T-test. The results of the hypothesis testing are shown in Table 10 below.

Table 10. Hypothesis Test

Variable	Direction Prediction	Koef. Regression	Prob.	Conclusion
Constanta		2.809489	0.2178	
Environmental Performance (X <sub>1</sub> )	-	-0.001361	0.5330	H <sub>1</sub> accepted
Social Performance (X <sub>2</sub> )		0.007301	0.0199	H <sub>2</sub> accepted
Governance Performance (X <sub>3</sub> )	-	0.002721	0.1772	H <sub>3</sub> rejected
Environmental Performance Moderated (X <sub>1</sub> M)	-	0.050800	0.0117	H <sub>4</sub> rejected
Moderated Social Performance (X <sub>2</sub> M)	-	-0.059050	0.0130	H <sub>5</sub> accepted
Moderated Governance Performance (X <sub>3</sub> M)	-	0.013053	0.4363	H <sub>6</sub> rejected
Company Size (K <sub>1</sub> )	-	-0.081673	0.3423	
Company Age (K <sub>2</sub> )		0.084146	0.4849	
Adjusted R <sup>2</sup>			0.909679	
Prob. (F-statistic)			0.000000	

Source: Processed by the researcher

Based on Table 10 above, the regression model equation formed is:

$$CoC = 2,809 - 0,001361ENV + 0,007301SOC + 0,002721GOV + 0.050800(ENV \times ROA) - 0.059050(SOC \times ROA) + 0.013053(GOV \times ROA) - 0.081673SIZE + 0.084146AGE$$

#### 1. F-Test

The F-test is conducted to determine the simultaneous effect of all independent variables on the dependent variable. Based on Table 10, the Prob. (F-statistic) value is 0.000000, which is less than 0.05. This indicates that the research model significantly influences the dependent variable simultaneously, confirming that the model is a good fit.

#### 2. T-Test

The T-test aims to assess the impact of each independent variable on the dependent variable. The T-test results for the environmental performance variable show a significance value of 0.5330, with a coefficient of 0.001361 in a negative direction. This indicates that environmental performance does not significantly negatively affect capital costs, leading to the rejection of H1.

For the social performance variable, a significance value of 0.0199 is obtained, with a coefficient of 0.007301 in a positive direction. This indicates that social performance has a significant positive effect on capital costs, thus accepting H2.

For the governance performance variable, the significance value is 0.1772, with a coefficient of 0.002721 in a positive direction. This indicates that governance performance does not significantly negatively affect capital costs, leading to the rejection of H3.

When the financial performance variable is added as a moderator, the T-test results for the regression model show that the significance value for the environmental performance moderated by financial performance is 0.0117, with a coefficient of 0.050800 in a positive direction. This indicates that financial performance weakens the significant negative relationship between environmental performance and capital costs, contrary to H4, leading to its rejection.

For the social performance variable moderated by financial performance, the significance value is 0.0130, with a coefficient of 0.059050 in a negative direction. This indicates that financial performance strengthens the significant negative relationship between social performance and capital costs, leading to the acceptance of H5.

For the governance performance variable moderated by financial performance, the significance value is 0.4363, with a coefficient of 0.013053 in a positive direction. This shows that financial performance weakens the positive relationship between governance performance and capital costs, but the effect is not significant, leading to the rejection of H6.

For the control variables, company size and company age, the significance values are 0.3423 and 0.4849, with coefficients of -0.081673 and 0.084146, respectively. These results indicate that the control variables do not significantly affect capital costs.

### 3. Coefficient of Determination Test

The coefficient of determination test is conducted to determine the extent of the influence of the independent variable variations on the dependent variable. The value of the coefficient of determination ( $R^2$ ) indicates the proportion of the dependent variable that can be explained by all the independent variables. Table 10 shows that the  $R^2$  value is 0.909679, which means that the dependent variable, capital costs, can be explained by the 3 independent variables, the 3 moderated independent variables, and the 2 control variables to the extent of 90.9%. The remaining 9.1% is explained by other variables not included in the model.

## Interpretation

The regression analysis is conducted to determine whether there is an influence of ESG performance on capital costs, with financial performance as a moderating variable. Based on the results shown in Tables 2 and 3, the model used is the Fixed Effect Model (FEM). This model assumes that all cross-section units have the same parameters. According to Table 10, the regression equation formed from the panel data using the FE model is as follows:

$$\begin{aligned} CoC = & 2,809 - 0,001361ENV + 0,007301SOC + 0,002721GOV \\ & + 0.050800(ENV \times ROA) - 0.059050(SOC \times ROA) + 0.013053(GOV \times ROA) \\ & - 0.081673SIZE + 0.084146AGE \end{aligned}$$

From the results, the constant value of 2.809 indicates that when all independent variables remain constant, the average WACC is 2.809. In terms of significance, the variables that significantly affect capital costs are social performance, moderated environmental performance, and moderated social performance. Other variables, including control variables that are not significant, are not discussed as they do not impact capital costs.

Social performance has a coefficient of 0.007301 with a positive direction. This means that for every one-unit increase in social performance (X2), there is an average increase of 0.007301 units in capital costs, assuming other variables remain constant. This empirical result is consistent with the second hypothesis, which states that social performance significantly affects capital costs.

The next variable that significantly affects capital costs is moderated environmental performance (X1M). This variable has a coefficient of 0.0500800 with a positive direction. This coefficient indicates that for every one-unit increase in moderated environmental performance (X1M), there is an average increase of 0.050800 units in capital costs. This coefficient is in contrast to the negative coefficient of X1, which is not significant. This suggests that the moderating effect of financial performance on environmental performance has a positive direction, weakening the negative relationship between environmental performance and capital costs significantly. This contradicts Hypothesis 4, leading to its rejection.

The final significant variable is moderated social performance (X2M). This variable has a regression coefficient of 0.059050 with a negative direction, meaning that every one-unit increase in moderated social performance (X2M) is associated with an average decrease of 0.007301 units in capital costs. This variable contrasts with X2, which has a significant positive impact. This indicates that the moderating effect of financial performance on social performance is negative, reinforcing the negative relationship between social performance and capital costs significantly. Therefore, Hypothesis 5 is accepted.

## Discussion

1. Impact of Environmental Performance on Capital Costs Legitimacy theory posits that companies can enhance their legitimacy and sustain their business in the long term by being environmentally responsible. Stakeholder theory also suggests that companies must be accountable to all their stakeholders, which can be achieved through effective ESG disclosure to demonstrate accountability and build trust. When companies are responsible towards their environment, they enhance their legitimacy and stakeholder trust, making access to capital easier and resulting in lower capital costs. Therefore, good environmental performance is expected to reduce capital costs.

However, the study findings indicate no significant effect between environmental performance and capital costs. This aligns with Khanchel & Lassoued (2022), who found that the environmental dimension negatively affects capital costs only in the first year, with no significant effect in subsequent years. Nonetheless, this result contradicts legitimacy and stakeholder theories, as well as studies by Eliwa et al. (2021), Garzón Jiménez & Zorio-Grima (2021), Ould Daoud Ellili (2020), Piechocka-Kałużna et al. (2021), and Priem & Gabellone (2024), which assert that environmental performance negatively impacts capital costs. The insignificant effect may be influenced by factors such as data variability, sample size, and less relevant model specifications.

2. Impact of Social Performance on Capital Costs

Stakeholder theory asserts that companies must be accountable to all stakeholders, including the communities in which they operate. This responsibility can be manifested through Corporate Social Responsibility (CSR) initiatives. CSR can enhance public and investor trust, thereby helping companies secure lower capital costs.

Contrary to this expectation, the findings indicate that social performance positively and significantly affects capital costs. This result contradicts stakeholder theory and does not support Priem & Gabellone (2024), which showed that social performance negatively and significantly impacts capital costs. However, this study aligns with findings by Dahiya & Singh (2020), who concluded that CSR has a positive and significant relationship with capital costs, particularly equity, and with Khanchel & Lassoued (2022), which stated that social disclosure tends to increase capital costs.

### 3. Impact of Governance Performance on Capital Costs

Agency theory suggests that conflicts between management and shareholders can be mitigated through good governance practices. One aspect of good governance is increasing transparency to shareholders, which can be achieved through ESG disclosures in annual reports. Enhancing corporate governance can reduce agency costs, giving investors and creditors confidence that their interests are protected, ultimately lowering capital costs.

However, the findings reveal that governance performance does not significantly affect capital costs. This contradicts agency theory and is inconsistent with studies by Eliwa et al. (2021), Garzón Jiménez & Zorio-Grima (2021), Ould Daoud Ellili (2020), Piechocka-Kałużna et al. (2021), and Priem & Gabellone (2024), which indicate that governance performance negatively affects capital costs.

### 4. Impact of Environmental Performance Moderated by Corporate Financial Performance on Capital Costs

Signaling theory suggests that a company's financial performance, reflected in its financial statements, serves as a signal to investors. Good financial performance is a positive signal, while poor performance signals negativity. Similarly, good environmental performance also sends a positive signal to investors. These positive signals can influence investment decisions, ultimately impacting capital costs negatively. Thus, companies with strong financial performance are expected to strengthen the negative relationship between environmental performance and capital costs.

However, the study results indicate otherwise. Environmental performance moderated by financial performance shows a positive and significant relationship with capital costs. This contradicts the hypothesis test results for environmental performance, which indicated a negative and insignificant relationship. This finding suggests that financial performance weakens the negative relationship between environmental performance and capital costs. Consequently, the results do not support agency theory and are inconsistent with studies by Buallay (2019), De Lucia et al. (2020), Duque-Grisales & Aguilera-Caracuel (2021), and Giannopoulos et al. (2022), which assert a positive relationship between environmental performance and corporate financial performance.

#### 5. Impact of Social Performance Moderated by Corporate Financial Performance on Capital Costs

Financial performance can aid companies in implementing social initiatives as part of their responsibility to stakeholders. Strong financial performance facilitates the provision of Corporate Social Responsibility (CSR). The implementation of social initiatives can reduce social risk, thus helping to lower capital costs. Therefore, companies with good financial performance are expected to strengthen the negative relationship between social performance and capital costs.

The findings align with this theory, indicating that social performance moderated by financial performance has a negative and significant relationship with capital costs. This demonstrates that financial performance strengthens the negative relationship between social performance and capital costs. This study is consistent with prior research by Duque-Grisales & Aguilera-Caracuel (2021), which states that greater liquidity helps companies enhance their ESG performance.

#### 6. Impact of Governance Performance Moderated by Corporate Financial Performance on Capital Costs

Corporate financial performance can help reduce agency costs, as shareholders perceive that the company is performing well and generating adequate profits. Moreover, good governance practices can be facilitated by strong financial performance. Thus, companies with good financial performance are expected to strengthen the negative relationship between governance performance and capital costs.

The results show that governance performance moderated by financial performance has a positive but insignificant effect on capital costs. This finding is similar to the relationship between governance performance and capital costs before moderation, which was also positive and insignificant. The moderating effect of financial performance only slightly enhances the relationship, yet it remains insignificant. Therefore, these results do not align with research by Giannopoulos et al. (2022) and Ould Daoud Ellili (2020), which suggest that financial performance and ESG can help lower corporate capital costs.

## CONCLUSION

Based on the research results and hypothesis testing regarding the impact of environmental, social, and governance performance on capital costs, with corporate financial performance as a moderating variable for companies listed in the ASEAN region from 2018 to 2022, the following conclusions can be drawn:

1. Environmental performance does not significantly affect capital costs.
2. Social performance has a positive and significant impact on capital costs.
3. Governance performance does not significantly affect capital costs.
4. Corporate financial performance weakens the negative impact of environmental performance on capital costs.
5. Corporate financial performance strengthens the negative impact of social performance on capital costs.
6. Corporate financial performance does not effectively moderate the impact of governance performance on capital costs.

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