DO ENVIRONMENTACOSTS AND HUMAN CAPITAINFLUENCE ENVIRONMENTAL, SOCIAAND GOVERNANCE (ESG) PERFORMANCE ? (Case Study of the LQ45 Company Listed on the Indonesia Stock Exchange (BEI) for the 2020 – 2022 Period)

Kharismatikhaulah J[a,1], Dwi Jayanti[b,2]
[ab]Accounting Departement Jenderal Achmad Yani University
Email : kharismatikha@gmail.com

ABSTRACT

The increasing awareness of the importance sustainability and sociaresponbility makes ESG a significant factor in investment decisions and corporate busines stategies. ESG risk rating is carried out to evaluate the extent to which the company can manage ESG risk. However, now there are stilmany companies that have a high risk rating including severaLQ45 companies that are listed on the Indonesian Stock Exchange. This research aims to find out whether environmentacosts and human capitaaffect environmental, sociaand governance performance. Environmentacost in this study are measured using the expenses incurred by the company for environmentaactivities. Human capitais measured using the Pulic method with the VAHU formula. Environmenral, Sociaand Governance is measured using ESG risk rating by Sustainalytics. The population in this study consist of LQ45 companies listed on the Indonesia Stock Exchange for period 20202022. The seected sample consists of 14 LQ45 companiesusing the purposive sampling method. The anaysis method used is mutiple linear regression analysis, pracede by the classicaassumtion test and hypothesis testing using t test and f test. The research result show that partially environmentacost do not have significant affect on environmental, social, and governance (esg) performance and humman capitahas a significant negative affect on environmental, social, and governance (esg) performance. Meanwhile, it simultaneously shows thas environmentacost and human capitahave a significant affect on environmental, social, and governance (esg) performance

Keywords: *Environmentacosts, human capital, ESG Performance*

1. INTRODUCTION

In era where sustainability is increasingly gaining attention, companies ae required to focus not only on profitability but also on the environmentaand sociaimpacts of their daily operationaactivities (1). The awareness and commitment of business actor arround the world to practices that support environmentasustainability and sociaactivities indicatte that the practice of Environmental, sociaand governance (esg) in the globadata stream has rapidly developed over the years as an effort by companies to remain sustainable (2). A study conducted by Harvard shows that in 2021, more than a quarttter of golbainvestors stated that environmental, sociaand governance (esg) are important aspects of their invesment appproach (3). The ESG conscept covers three aspects that is enviromentaaspect such as waste management and the use of sustaibanle energy, sociaaspects suh as the company's relationship with employees, and corporate governance aspects incuding business practices and legacompliance (4).

There are various methods to meansure a company's ESG performance, reflecting the company's responsibility and sustainability practies in its business operation. In recent years, severaESG rating agencies have emerged to evaluate ESG performance, one of which is the ESG risk rating developed by Sustaianalytics. Sustanalytics's ESG risk rating provide insight into corporate ESG risk by meansuring the size of an organization's unmanaged ESG risk. There are 5 categories assessment in the ESG risk rating, the first category with an ESG risk rating of 0-9 is a negligible risk and successfully managed risk. The second category with an ESG risk rating of 10-19,9 is a low risk and is welmanaged. The third category with an ESG risk rating of 20-29,9 represent medium risk, meaning the company requires more attention to manage ESG risk, The fourth category with an ESG risk rating of 40+ is deemed severe risk, meaning the sustainability practices and risk management (5).

In Indonesia, there are severaLQ45 companies that stilhave a high ESG risk rating. For example, PT United Tractor Tbk had an ESG risk rating of 41,32 in 2022, which falls into the severe risk category. PT Indocement TunggaPrakarsa had an ESG risk rating of 27,22 in 2021, placing it in the medium risk category. PT Kalbe Farma Tbk had an ESG risk rating of 32,84 in 2022, which is considered high risk. Companies with high ESG risk ratings indicate significant exposure to ESG risk and the need for effective risk management. This not only has the potentiato affect the company's reputation and financiaperformance but can also limit their access to investors who increasingly priotize sustainability in their investments decisions

In the research conducted by (Hapsari, 2021) the result indicate that allocating environmentacosts to environmentaperformance has a positive affect on environmentaperformance. Research conducted by (Rahayudi & Apriwandi, 2023) the result indicate that environmentacost have ni affect on environmentaperformance. Research conducted by (Petre & Plesea, 2023) the result indicate that human capitahas a limited overalinfluence, with significant correlation noted only in relation to employees who undergo job training in that field. This suggests that while human capitais important, its impact may be more pronounced in specific areas such as employee development and training. Research conducted by (Mrbun & Saragih, 2018) the result show that human capitahave an affect on company performance.

Research on company performance and environmentaperformance has been widely conducted, but in this study, the researcher wants to try using the ESG risk rating as a new indicator in meansuring company performance. Furthermore, due to the existence of inconsistent research result, the author is interested in conducting research with the title "DO ENVIRONMENTACOSTS AND HUMAN CAPITAINFLUENCE ENVIRONMENTAL, SOCIAAND GOVERNANCE (ESG) l PERFORMANCE? (Case Study of the LQ45 Company Listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 Period)

2. LITERATURE REVIEW

Stakeholder Theory

Every company is carrying out its operationaactivities, should not only act for its own benefit but also contribute to and be responsible to the company's stakeholders, including shareholders, creditors, government suppliers and the public, as welas other parties (9). Another definition of stakeholder theory is that it is a part of strategic issues related to how a company manages relationship with its stakeholders. The company is required to pay attention to and provide benefits to stakeholders because the existence of stakeholders can influence or be influenced by the policies taken by the company in its business activities (10).

Legitimacy Theory

Legitimacy theory is atheory that expain that a company is part of society, and therefore it needs to comply with the socianorms prevailing in the community (11). Legitimacy theory considers society to be an important factor for the long term survivaof the company (12). Legitimacy is important for an organization, and these boundaries encourage the importance of analyzing organizationabehaviour by taking into account its environment (13).

EnvironmentaCost

Environmentacosts are costs incurred by a company for environmentamanagement due to the company's daily operationaactivities. Meanwhile, another define environmentacosts as monetary and non-monetary impacts arising from company activities that affect environmentaquality (14). Environmentacosts as including internaand externacosts in managing the impact of the company's operationaactivities to show responsibility in complying with applicable regulations and optimizing resources, and can influence sustainable development and sustainability reports with company performance because environmentacosts include costs used by companies in carrying out corporate sociaresponsibility operations (14).

According to (Dewata, 2018) measuring environmentacosts is by comparing the costs incurred by companies for environmentaprograms with net profits. The formula used to measure environmentacosts is:

EnvironmentaCosts = EnvironmentaProgram Costs

Human Capital

The role of human capitais very important for a company because human capitawilbecome the driving system in the company or the company's work system. Human Capitaas a collection of individuaknowledge of an organization presented by its employees, including competencies such as skills and knowledge as welas employees' attitudes towards their work. Human Capitais the company's collective ability to take the best solutions from the knowledge of each employee. Human Capitais important because Human Capitais a source of innovation and corporate strategy renewa(16).

In (Tran & Vo's, 2018) research, human capitawas measured using the VAIC™ modedeveloped by Pulic. The theory underlying Pulic's modeis to treat labor as a value-creating entity. Human Capitais measured using the Value Added Human CapitaCoefficient (VAHU) which can show how much added value (VA) is generated from the funds spent on labor. The formula used to measure VAHU is:

VAHU=VA/HC

VA (Added Value) = Output – Input
Output = Totacompany income
Input = Alexpenses except employee expenses
HC (Human Capital) = Totaemployee expenses and employee training costs

ESG Risk Rating

ESG Risk Rating is a performance evaluation toofor ESG developed by Sustainalytics. Sustainalytics' ESG Risk Rating measures the extent to which a company's economic value is at risk due to poorly managed ESG factors. A multidimensionaapproach in measuring ESG risk is by combining the concepts of management and exposure to provide an absolute assessment of ESG risk. The important points about ESG risk rating are totaexposure, which is a measurement that begins by identifying exposure to each materiaESG issue at the sub-industry level, manageable risk, which is the ESG risk that can be managed by the company evaluated, Unmanageable risk, which is the ESG risk not managed by the company assessed, Managed risk, which is the ESG risk successfully managed by the company, Management gap, which is the gap between the risk that can be managed by the unmanaged risk, unmanaged risk, which is the ESG risk not managed by the company (5).

3. DATA AND RESEARCH TECHNIQUE ANALISYS

The population in this study is the companies that are incorporated in the LQ45 index and listed on the Indonesia Stock Exchange (IDX) in the period 2020-2022. The sampling technique used in this study is using the Non-Probability Sampling method, the type of technique used is purposive sampling. The selected sample is the LQ45 Index companies listed on the Indonesia Stock Exchange for the period 2020-2022, totaling 14 companies with observation years for 3 years to become 42 samples. In this study, the analysis method used is the multiple linear analysis method, where before performing multiple linear regression analysis, the assumption test is first performed. The conclusion drawing in this study is done by using a partiahypothesis test, namely the t-test and a simultaneous hypothesis test, namely the f-test.

4. RESULT AND DISCUSSION

Multiple Linear Regression Analysis

Data processing in this research uses the IBM SPSS 26 application with the following regression test results:

Table 1 : Multiple Linear Regression Analysis Test Results

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients		
Mode	B	Std. Error	Beta	T	Sig.
(Constant)	12.269	.763		16.083	.000
LAG_X1	7.938E-12	.000	.144	.949	.349
LAG_X2	-1.021	.412	-.374	-2.476	.018

a. Dependent Variable:LAG_Y

Source SPSS Output Results Version 26 (data processed in 2024)

Based on the regression statistical test above, the following multiple regression equation can be obtained:

$$Y = 12.269 + 7.938E\text{-}12\ B – 1.021\ HC + \epsilon$$

Correlation Coefficient Analysis

Table2 : Interpretation Results from Correlation

VariabeXl onship l	Correlation l Coefficilent	Coefficient Interval	Relati Level
Environmenta Cost (X1)l	0,171	0,00 – 0,199	Very Llow
Human Capital(X2)	-0,312	0,20 – 0,399	Low

Source: SPSS Output Results Version 26 (data processed in 2024)

Based on table 2 above, the results of testing the relationship between environmental cost variables and environmental, social and governance (ESG) performance variables are presented which are very low. Meanwhile, the relationship between human resource variables and environmental, social and governance (ESG) performance variables is low.

Determination Coefficient Analysis

$$\begin{aligned} Kd &= R2 \times 100\% \\ &= (0.383)^2 \times 100\% \\ &= 14.66\% \end{aligned}$$

Based on the calculation results above, it can be concluded that the analysis value of the coefficient of determination is 14.66%. This means that the environmental, social and governance (ESG) performance variable is influenced by independent variables, namely environmental costs and human resources, amounting to 14.66, while the other 85.34% is influenced by other factors outside this research.

Partial Hypothesis Test (t Test)

The t table value is for a 5% error rate and a 95% confidence level of degrees of freedom degree of freedom (df) = n – k = 42 -3 = 39. So the t table value is 1.685.

Table3 : Individual Parameltelr SignificanceTest Results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		

(Constant)l	34.775	2.142		16.232	.000
Biaya lingkungan	1.520E-l 11	.000	.219	1.462	.152
Human Capita	-1.389	.607	-.342	-2.289	.028

a. Dependent Variable:Kinerja ESG
Source: SPSS Output Results Version 26 (data processed in 2024)

1. Testing Environmental cost variables

The environmental cost variable (X1) in the table above shows a calculated T result of 1.462 and a T table value of 1.685, which means that T calculated < T table, this shows that H0 is accepted and H1 is rejected. With a significance result of 0.152 > 0.05, it can be concluded that the environmental cost variable has no effect on environmental, social and governance (ESG) performance.This happens due to the complexity and interaction of the influence of other factors such as social and governance that may have a stronger influence on the ESG risk rating.

2. Testing Human Capital Variables

The human capital variable (X2) in the table above shows a calculated Tresult of 2.289 and a T table value of 1.685, which means that T calculated > T table, this shows that H0 is rejected and H1 is accepted. With a significance result of 0.028 <0.05, it can be concluded that the human capital variable has a negative and significant effect on environmental, social and governance (ESG) performance. This influential condition is caused by ESG performance that uses the ESG risk rating indicator, where if the rating is higher,the likelihood of the ESG risk conditioln owned by the company is higher and the ESG performance is getting worse.

Simultaneous Hypothesis Testing (f Test)

F table calculation is obtained from (df) = kl–1 = 3–1 = 2 and (df2) = n – k = 42-3 = 39, then the F table value can be obtained, namely 3.238l

Table4 : Simutaneous Parameter Significance Test Results

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	190.504	2	95.252	3.289	.048[b]
Residual	1129.398	39	28.959		
Total	1319.901	41			

a. Dependent Variable e:Kinerja l ESG

b. Predictors: (Constant), Human Capital, Biaya lingkungan *Solurce: SPSS Output Results Version 26 (data processed in 2024)*

Based on table 4 above, it can be seen that the calculated F value for an independent (free)variables is 3.289 > 3.238 or the calculated F value > F table and the significance value is 0.048 < 0.05, so it can be concluded that H0 is rejected and Ha is accepted, which means environmental and human capital costs together (simultaneously) have a significant effect on environmental, social and governance (ESG) performance)

5. CONCLUSION

This research was conducted to test whether environmental costs and human capital have an impact on ESG performance. The human capital of LQ45 companies listed on the Indonesia Stock Exchange from 2020 to 2022 is considered good. The average value of human capital owned by the company in those years is increasing. This indicates that the company has added value in employing employees. Environmental costs at LQ45 companies show an average value that increases elv ery year. Thels e costs are on average more spent on biodiversity conservation activities. The ESG risk rating of LQ45 companies listed on the Indonesia Stock Exchange in 2020 – 2022 shows an average value that is increasing. This indicates that LQ45 companies are still not effective in managing ESG risk factors and have poor ESG risk.

Environmental costs partially have no effect on ESG performance. Human capital partially has a negative and significant effect on ESG performance. At the same time environmental costs and human capital have a significant effect on ESG performance.

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