

The Influence of Corporate Sustainability Performance (CSP) on Profitability with Liquidity and Leverage as Moderating Variables in LQ45 Index Companies on the Indonesia Stock Exchange (IDX)

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ABSTRACT

This study aims to analyse the effect of corporate sustainability performance (CSP) on profitability with liquidity and leverage as moderating variables in LQ45 companies listed on the Indonesia Stock Exchange (IDX). This research is a causative research. The population in this study were all LQ45 indexed companies listed on the IDX for the 2019-2023 period. The sampling technique in this study was purposive sampling so that 18 companies were selected. The type of data used is secondary data obtained from the IDX website www.idx.co.id and the company's official website. The analysis method used is panel data regression analysis using STATA version 14.2. The results of this study indicate (1) corporate sustainability performance (CSP) has a positive and significant effect on profitability, (2) liquidity as a moderating variable can strengthen the relationship between corporate sustainability performance (CSP) and company profitability, (3) leverage as a moderating variable can weaken the relationship between corporate sustainability performance (CSP) and company profitability.



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INTRODUCTION

The LQ45 Index consists of the 45 most actively traded stocks with consideration of liquidity and the largest market capitalisation while also having good company fundamentals that are adjusted every six months (in early February and August). According to Larasati et al. (2013), the LQ45 index controls almost 70% of share ownership in the capital market. The stocks included in the LQ45 index are liquid stocks with high stock trading transactions according to the frequency and volume of stock trading, as well as having good growth prospects and financial conditions for a long time, not volatile and have been selected objectively based on predetermined criteria (Chandra & Hapsari, 2013).

The diversity of company sectors in this index allows for a more comprehensive and representative analysis of stock market performance in Indonesia. Therefore, companies that are members of the LQ45 have the potential to disclose more extensive sustainability reports. This is due to the strong financial condition and high transaction value of LQ45 companies, providing greater opportunities for profit.

Profitability is one of the main focuses in determining the overall business strategy of a company. The underlying purpose of creating a business is to make a profit, which makes profitability a key focus for analysts and investors. According to Weston (1990), profitability ratios can reflect the performance of company management.

In measuring the profitability ratio of a company, return on assets (ROA) and return on equity (ROE) are used. Return on assets (ROA) is a ratio used to measure the company's ability to generate profits because this ratio represents the return on the company's activities. According to Sudana (2015), this ratio is important for management in assessing the effectiveness and efficiency of managing all company assets.

Table 1. ROA of Several LQ45 Index Companies

Company	Return On Asset (%)					Mean
	2019	2020	2021	2022	2023	
Bank Mandiri (Persero) Tbk.	3.03	1.64	2.53	3.30	3.44	2.79
Telkom Indonesia (Persero) Tbk.	12.50	12.00	12.20	10.10	11.2	11.60
Bank Central Asia Tbk.	4.02	3.32	3.41	3.91	3.60	3.65
Bank Rakyat Indonesia (Persero) Tbk.	3.50	1.98	2.72	3.76	3.93	3.18
Astra International Tbk.	8.00	5.00	7.00	10.00	10.00	8.00
Company Average / Year	6.21	4.79	5.57	6.21	6.43	

Source : Company Annual Report

Based on the Table 1, it can be seen the development of ROA value in several LQ45 index companies listed on the Indonesia Stock Exchange from 2019-2023. In this table, it is clear that the average ROA value of companies in 2020 has decreased significantly due to declining economic conditions due to the Covid-19 pandemic (*katadata.co.id*, 2020). The highest ROA value is found in Telkom Indonesia (Persero) Tbk. in obtaining profit on the use of company assets of 12.50%. While the lowest ROA was obtained by Bank Mandiri (Persero) Tbk. of 1.64% in 2020. This shows that the assets owned by the company only generate a small profit of 1.64%.

According to Kasmir (2012) Return On Equity (ROE) is a ratio to measure net profit after tax with own capital. This ratio shows the efficiency of using the company's capital, where the higher this ratio, the stronger the company's position. This ratio is important to use in disclosing profitability because this ratio not only measures how effective the company's management is in managing its own capital, but also can measure the level of return on investment that has been made by the owner of its own capital or shareholders.

Table 2. ROE of Several LQ45 Index Companies

Company	Return On Equity (%)					Mean
	2019	2020	2021	2022	2023	
Bank Mandiri (Persero) Tbk.	15.08	9.36	16.24	22.62	27.31	18.12
Telkom Indonesia (Persero) Tbk.	23.50	24.50	23.30	18.50	20.60	22.08
Bank Central Asia Tbk.	17.97	16.54	18.25	21.70	23.50	19.59
Bank Rakyat Indonesia (Persero) Tbk.	19.41	11.05	16.87	20.93	22.94	18.24
Astra International Tbk.	14.00	10.00	12.00	17.00	18.00	14.20
Company Average / Year	17.99	14.29	17.33	20.15	22.47	

Source : Company Annual Report

Based on Table 2, it can be seen the development of ROE values in several LQ45 index companies listed on the Indonesia Stock Exchange from 2019-2023. It can be seen that the average ROE value tends to fluctuate every year. The highest ROE value was found in Telkom Indonesia (Persero) Tbk at 24.50% in 2020, meaning that the company's ability to earn profits on the use of company equity was 24.50%. While the lowest ROE was obtained by Bank Mandiri (Persero) Tbk. amounting to 9.36% in 2020. This shows that net profit when compared to the capital owned by the company only produces a small profit of 9.36%. The average company experienced a decrease in ROE from 2019 to 2020 and an increase in 2021, except for Telkom Indonesia (Persero) Tbk which experienced an increase in 2020.

Several studies have shown that the profitability of a company can be influenced by various factors, including liquidity, company size, company age, company growth, fixed assets, working capital, cash ratio, leverage, total asset turnover, debt ratio, and capital structure (Novyanny & Turangan (2019); Henny & Susanto (2019)). In addition to the factors mentioned above, there is another interesting factor to research that is thought to affect profitability, namely 'sustainability'. Shabbir & Wisdom (2020) describe that companies with higher environmental investment have a higher level of profitability than companies that are not environmentally conscious.

Corporate Sustainability is a company's responsibility to ensure that its operations not only generate financial benefits, but also make a positive contribution to society and the environment. The trend of publishing sustainability reports has shown a significant increase in recent years. Reporting from *www.pwc.com* disclosure of sustainability reports has been mandatory for financial institutions and public companies since 2019 and listed companies in 2020. However, the COVID-19 pandemic caused the implementation to be delayed until 2021. In the second year of the implementation of this policy, that of the total 825 companies listed on the Indonesia Stock Exchange 88% or 726 companies have submitted their sustainability reports for 2022. This increase is due to more companies recognising the importance of transparency in communicating their sustainability-related efforts to stakeholders. In this report, companies describe in detail their commitments to the environment, society and good governance. The delivery of this detailed information enables stakeholders to gain a better understanding of how a company operates responsibly and sustainably.

Disclosing sustainability reports allows for an increase in financial performance (profitability). This is because the information disclosed about the economic, social and environmental aspects of the company can increase stakeholder confidence and convince investors that the company can sustain for the long term.

Furthermore, liquidity is used as a moderating variable in this study because theoretically liquidity and profitability are interrelated. If the company is able to fulfil its short-term obligations using current assets, it can be said that the company has the availability of funds to pay short-term financial obligations which will have an impact on the profits earned by the company (Alicia, 2017). Saragih (2015) found that the current ratio has a significant positive effect on profitability. Manullang and Hutabarat (2020) found that simultaneously the level of sustainable growth and liquidity significantly affects company profitability.

Leverage proxied by debt to equity ratio (DER) shows the proportion of the use of debt to finance the company's investment (Sartono, 2010). High or low DER value will affect the profitability achieved by the company. According to Brigham (2001), if the cost indicated by the loan (cost of debt) is smaller than the cost of own capital (cost of equity), it will be more effective to use loans in generating profits and vice versa. However, the higher the DER value, the greater the company's burden on outsiders so that it will reduce the profitability obtained by the company. According to Lestari (2020) leverage has a significant negative effect on financial performance. In addition, Fauzi et al. (2017) found that financial leverage as a moderating variable is significantly able to moderate the relationship between corporate sustainability performance and corporate financial performance.

This research was conducted as a development of research conducted by Taha et al. (2023) which examines the relationship between corporate sustainability performance (CSP) and profitability with liquidity and stock price volatility as moderating variables. However, the difference with this study is that stock price volatility is not used as a moderating variable and is replaced by leverage as a moderating variable. The use of the leverage variable is intended to determine whether the use of financial leverage as a moderating variable can significantly weaken the relationship between corporate sustainability performance and corporate financial performance or vice versa. In addition, this study also uses a different research object, namely the LQ45 index companies listed on the IDX with an observation period from 2019 to 2023.

LITERATURE REVIEW

Stakeholder Theory

Stakeholder theory was first proposed by R. Edward Freeman in 1984. Donaldson & Preston (1995) describe that this stakeholder theory refers to how companies manage all relationships owned by the company (internal or external of the company) to achieve company sustainability as the company's main goal. According to Nuraeni & Darsono (2020), one of the needs of stakeholders is to receive information about the company's performance related to the economic, environmental and social fields submitted by the company through sustainability reports.

Legitimacy Theory

According to Dowling & Pfeffer (1975), Legitimacy is important in organisations, containing the limits imposed by social norms and values and the reactions to these limits encourage the importance of analysing organisational behaviour with a concern for the environment. Legitimacy has a crucial role in the context of the company because the recognition given by society is a strategic foundation for the company's future growth. A company will gain legitimacy if it has similar results to what society expects of the company (Deegan, 2004).

Trade-Off Theory

This theory is a modification of the capital structure theory model proposed by Modigliani and Miller (MM) in 1958 which concluded that the use of debt will indeed increase the value of the company. However, when the capital structure is optimal, the value of the company will begin to decline with the increasing proportion of debt in its capital structure (Modigliani & Miller, 1963). This is because the benefits obtained are smaller than the costs arising from the use of debt. According to Pramana & Darmayanti (2020), companies need an optimal target leverage ratio so as to minimise the risk of bankruptcy and increase company profits.

Profitability

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital (Sartono, 2010). Profitability is one of the main indicators that show how efficient a company is in generating profits from its resources.

Corporate Sustainability Performance

Corporate sustainability is a measure of the impact of company policies in the economic, environmental, social, and governance spheres on society (Artiach, et al., 2010). In addition, according to Tasleem, et al. (2019) corporate sustainability performance is an organisation or company that can find a balance between profit-oriented goals and socially and environmentally relevant goals in carrying out the activities or operations of a company. In this research, the GRI 2021 topic standard is used so that the assessment carried out focuses on three categories, including economic, environmental, and social categories as a measure of Corporate Sustainability Performance (CSP).

Leverage

Leverage describes the extent to which a company depends on debt in funding its operational activities (Oktaviani & Amanah, 2019). In addition, this ratio also shows the risk faced by the company when using debt as a source of company operating funds.

Liquidity

Liquidity is the company's ability to convert assets into cash to fulfil the company's short-term obligations (Subramanyam, 2014). The short term is conventionally considered to be a period of up to one year, although it is identified with the normal operating cycle of a company (the period encompassing the buy-produce-sale-collect cycle).

Firm Size

Company size is a scale that can classify the size of the company from various aspects, including total assets, average total assets, stock market value, total sales, average sales, total profit, number of employees, and others (Dang, 2018). The larger the total assets of the company, the company will have better prospects in the long term because the company will be more stable and more able to generate profits than companies with small total assets (Ngidam & Puspitasari, 2014).

Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

CSP can affect the profitability of the company because the information disclosed (related to economic, social and environmental aspects) can increase stakeholder confidence and convince investors that the company can survive in the long term. This is in line with the instrumental stakeholder theory described by Donaldson & Preston (1995), there is an effect of increasing company profits or wealth when companies consider various stakeholder interests in corporate strategy. According to Li et al, (2019) there is a positive influence between the disclosure of corporate sustainability performance and the profitability of the company. In addition, the results of this study are consistent with research conducted by Johari & Komathy (2019), sustainability reports have a positive effect on the company's return on assets and earnings per share.

H1: Corporate Sustainability Performance has a positive effect on company profitability

The Effect of Liquidity (CR) as Moderating Variable on the Relationship between Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

According to the trade-off theory, companies need to balance the benefits and costs of using debt. Liquidity shows the company's ability to pay its short-term liabilities using current assets on time. The greater the liquidity of the company indicates that the company has sufficient current assets to fulfil the company's current liabilities. Companies with good liquidity can invest in corporate sustainability practices (by managing various risks, be it environmental, social, or community) so as to increase company profitability. According to Taha et al. (2023), liquidity as a moderating variable can strengthen the influence between CSP and company profitability.

H2: Liquidity is able to moderate the effect of CSP on company profitability.

The Effect of Leverage (DER) as Moderating Variable on the Relationship between Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

The concept is based on trade-off theory to balance the benefits and costs arising from the use of debt. The mechanism is that the use of debt can still be used by companies when the benefits received by the company are greater than the costs incurred from debt. However, the use of debt that is too high will result in the company experiencing financial difficulties until bankruptcy. Leverage describes the proportion of debt use to the capital owned by the company. Increased use of debt will result in a decrease in profitability owned by the company. Based on research conducted by Patel (2018), it is found that an increase in leverage can have a negative impact on the profit margin, return on assets and return on equity of a company. The higher the leverage, the company will prioritise its funds to pay debt rather than improve sustainability performance as well as the company's financial performance. According to Fauzi et al. (2017), financial leverage as a moderating variable significantly weakens the relationship between sustainability performance and corporate financial performance

H3 : Leverage is able to moderate the effect of CSP on company profitability.

Conceptual Framework

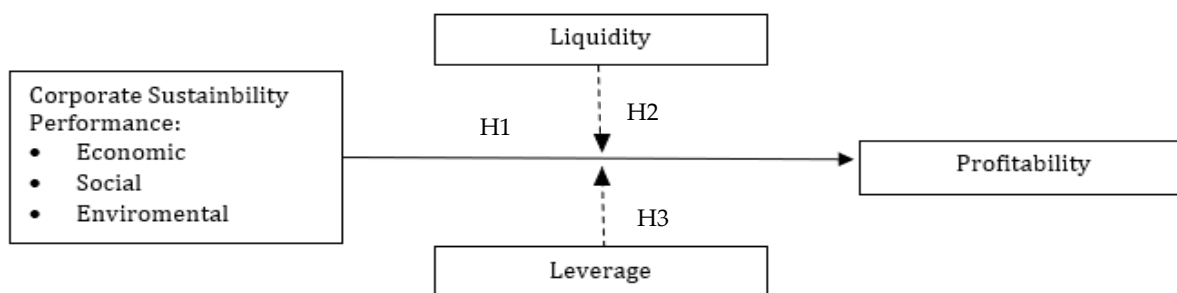


Figure 1 : Conceptual Framework

METHOD

Type Of Research

The type of research used in this study is quantitative research method. According to Indriantoro & Supomo (1999), quantitative research is research conducted to test hypotheses through theory validation or using testing of the application of theory in a particular situation. This research is classified as causal research, namely the causal relationship between the independent variable and the dependent variable (Indriantoro & Supomo, 2018).

Population

The population in this study are companies with the LQ45 index listed on the IDX for the period 2019-2023. The companies included in this index contain the 45 best stocks from the ESG performance assessment results and have good liquidity.

Sample

The sample selection in this study was carried out using purposive sampling method, which is a sampling technique with certain considerations (Sugiyomo, 2010). The criteria for sampling criteria in this study are:

1. LQ45 companies listed on the IDX consecutively in 2019-2023
2. Companies with the LQ45 index that publish annual reports during 2019-2023
3. Companies with the LQ45 index that publish sustainability reports and can be accessed from each company's official website
4. The company has implemented GRI standards in the sustainability report

Table 3. Sampling Criteria After Processing

Sampling Criteria	Quantity
LQ45 companies listed on the IDX consecutively in 2019-2023	23
Companies with the LQ45 index that did not publish annual reports during 2019-2023	0
Companies with the LQ45 index that did not publish sustainability reports during 2019-2023	(5)
The company does not apply GRI standards in sustainability report	0
Total companies sampled for the study	18
Total company years	5
Total observations	90

Source : Data processed by the author (2024)

Based on the Table 3, The number of LQ45 index companies listed on the Indonesia Stock Exchange consecutively in the 2019-2023 period is 23 companies. However, there are 5 companies that did not publish sustainability reports during 2019-2023. Therefore, 18 companies were selected as samples in this study with a company period of 5 years from 2019 to 2023 with 90 observations.

Operational Definition and Variable Measurement

The operational definitions and measurements of the variables in this study are as follows :

Table 4 . Operational Definition and Measurement of Variables

Variable	Operational Definition	Proxy	Measurement	Source
Dependent Variable				
Profitability	Describes the efficiency of a company in generating profits from its resources.	$ROA = \frac{Net\ Income}{Total\ Assets} \times 100$ $ROE = \frac{Net\ Income}{Total\ Equity} \times 100$	Ratio	Sartono, R. A. (2010)
Independent Variable				
Corporate Sustainability Performance (CSP)	The total of an organisation's performance, which includes the organisation's policies, decisions, and actions in creating economic, social and environmental value.	$CSP = \frac{The\ number\ of\ items\ disclosed}{The\ expected\ number\ of\ items}$	1 = as per GRI 2021 topic standards 0 = not in accordance with GRI 2021 topic standards	Astuti & Juwenah (2017)
Moderating Variable				
Liquidity	The company's ability to pay its short-term debt using current assets.	$CR = \frac{Current\ assets}{Current\ Liabilities}$	Ratio	Sartono, R. A. (2010)
Leverage	The proportion of the use of debt to finance the company's investment.	$DER = \frac{Total\ Debt}{Total\ Equity}$		
Control Variable				
Size	Company scale as seen from the company's total assets.	SIZE = LN. Total Assets	Rupiah	Rivai, et al. (2007)

Data Analysis Techniques

In the process of performing the data analysis technique, STATA 14.2 software was used.

1. Descriptive Statistic

Descriptive statistical analysis is the process of converting research data into a table form, so that it is easy to understand and interpret.

2. Normality Test

The normality test aims to test whether each variable has a normally distributed residual value or not. In a good regression model, the residuals are expected to have a normal distribution pattern.

3. Multicollinearity Test

This multicollinearity test is intended to test whether there is a high or perfect correlation between the independent variables in the regression model. A good regression model should have independent variables that are not correlated with each other.

4. Heteroscedasticity Test

This heteroscedasticity test aims to test whether in the regression model there is an inequality of variation or variance from the residuals of one observation to another. A good regression model is one that does not have heteroscedasticity problems.

5. Panel Data Regression Analysis

Panel data or often referred to as longitudinal data is a set of sample data that is observed and observed over time with the aim of collecting observation data from the sample (Hsiao, 2022).

Panel data regression analysis consists of several models :

a. Pooled Least Square Model

Pooled Least Square (PLS) is the simplest method in panel data analysis, as it combines time series and cross-section data without regard to time or individual variation. This method can use the Ordinary Least Square (OLS) approach.

b. Fixed Effect Model

Fixed Effect Model (FEM) is a method that assumes that the coefficient (slope) remains constant, but the intercept varies between individuals.

c. Random Effect Model

Random Effect Model (REM) is a panel data estimation in which the residual variables are expected to have a relationship between time and between individuals.

The equation used for panel data regression analysis :

Model 1 :

$$ROA_{it} = \alpha + \beta_1 CSP_{it} + \beta_2 SIZE_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha + \beta_1 CSP_{it} + \beta_2 SIZE_{it} + \varepsilon_{it}$$

Model 2:

$$ROA_{it} = \alpha + \beta_1 LQ_{it} + \beta_2 CSP_{it} + \beta_3 CSP \times LQ_{it} + \beta_4 SIZE_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha + \beta_1 LQ_{it} + \beta_2 CSP_{it} + \beta_3 CSP \times LQ_{it} + \beta_4 SIZE_{it} + \varepsilon_{it}$$

Model 3:

$$ROA_{it} = \alpha + \beta_1 LEV_{it} + \beta_2 CSP_{it} + \beta_3 CSP \times LEV_{it} + \beta_4 SIZE_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha + \beta_1 LEV_{it} + \beta_2 CSP_{it} + \beta_3 CSP \times LEV_{it} + \beta_4 SIZE_{it} + \varepsilon_{it}$$

Description:

CSP = Corporate Sustainability Performance

ROA = Return On Asset

ROE = Return On Equity

LQ = Liquidity

LEV = Leverage

SIZE = Size

α = Constant

β_1, β_3 = Moderating variable coefficient

β_2 = Independent variable coefficient

β_4 = Control variable coefficient

ε_{it} = Error term

In selecting the panel data regression model above, several tests will be carried out as follows:

1. The Chow Test

The chow test is a test to choose whether to use Pooled Least Square (PLS) or Fixed Effect Model (FEM).

2. The Hausman Test

The Hausman test is a test conducted after passing the chow test (with FEM as the selected model) to determine the type of research regression model to be used, either the Fixed Effect Model (FEM) or the Random Effect Model (REM).

3. The Lagrange Multiplier (LM) Test

The Lagrange Multiplier (LM) test is a test conducted after the chow test (with PLS as the selected model) or after the hausman test (with REM as the selected model) to determine the type of research regression model to be used, namely Pooled Least Square (PLS) or Random Effect Model (REM).

RESULT AND DISCUSSION

Data Description

In this study, panel data is used which is a combination of time series data with cross section data for five years (2019-2023) from 18 companies. However, from the selected 18 companies there is outlier data which causes a reduction in the existing sample to 16 companies with a total of 80 observation data.

Table 5. Results of Statistical Descriptive Analysis of Research Variables

Variabel		Mean.	Std. Dev.	Min.	Max.	Obs.
ROA	Overall	0.079	0.078	0.004	0.454	N = 80
	Between		0.063	0.013	0.221	n = 16
	Within		0.048	-0.109	0.312	T = 5
ROE	Overall	0.148	0.107	0.011	0.615	N = 80
	Between		0.079	0.043	0.296	n = 16
	Within		0.074	-0.103	0.467	T = 5
CSP	Overall	0.479	0.223	0.083	1.000	N = 80
	Between		0.155	0.248	0.750	n = 16
	Within		0.164	0.143	0.936	T = 5
CR	Overall	1.910	1.234	0.336	5.655	N = 80
	Between		1.210	0.372	4.806	n = 16
	Within		0.364	0.750	3.399	T = 5
DER	Overall	1.759	1.695	0.129	6.611	N = 80
	Between		1.653	0.142	5.695	n = 16
	Within		0.624	-1.352	4.395	T = 5
SIZE	Overall	32.568	1.549	30.420	35.315	N = 80
	Between		1.581	30.826	35.096	n = 16
	Within		0.170	32.151	33.080	T = 5

Source : Stata 14.2 processed results

Table 3 shows that overall ROA shows a minimum value of 0.004, a maximum value of 0.454 with an average of 0.079 and a standard deviation of 0.078. The overall ROE shows a minimum value of 0.011, a maximum value of 0.615 with an average of 0.148 and a standard deviation of 0.107. The overall CSP variable shows a minimum value of 0.083, a maximum value of 1 with an average of 0.479 of the total number of items disclosed, namely 84 items and a standard deviation of 0.223. The overall CR variable shows a minimum value of 0.336, a maximum value of 5.655 with an average of 1.910 and a standard deviation of 1.234. The overall DER variable shows a minimum value of 0.129, a maximum value of 6.611 with an average of 1.759 and a standard deviation of 1.695. The overall company size shows a minimum value of 30,420, a maximum value of 35,315 with an average of 32,568 and a standard deviation of 1,549.

The standard deviation value owned by the various variables above is still lower than the mean value, which means that the variables used in this study have a small data distribution so that the data is well distributed.

Normality Test

The residual value is said to be normally distributed if it has a probability value greater than the significance level of 0.05. Research data will fulfil the BLUE (Best Linear Unbiased Estimator)

assumption if the residual data is normally distributed. Normality testing is done using the Skewness / Kurtosis Test.

Table 6. Normality Test

MODEL 1							
ROA				ROE			
Variable	Skewness	Kurtosis	Joint	Variable	Skewness	Kurtosis	Joint
Residual 1	0,0799	0,3571	0,1298	Residual 2	0,1376	0,2449	0,1545
MODEL 2							
ROA				ROE			
Variable	Skewness	Kurtosis	Joint	Variable	Skewness	Kurtosis	Joint
Residual 3	0,0662	0,3681	0,1165	Residual 4	0,1903	0,1635	0,1466
MODEL 3							
ROA				ROE			
Variable	Skewness	Kurtosis	Joint	Variable	Skewness	Kurtosis	Joint
Residual 5	0,1729	0,1118	0,1076	Residual 6	0,0529	0,5644	0,0887

Source : Stata 14.2 processed results

It can be seen that the residual values in all models used have a significance value smaller than 0.05, whether it is from the skewness test, kurtosis test, or the use of these two test.

Multicollinearity Test

Table 7. Multicollinearity Test

MODEL 1		
Variable	VIF	1/VIF
CSP	5.64	0.177
SIZE	5.64	0.177
Mean VIF	5.64	
MODEL 2		
Variable	VIF	1/VIF
CSP	6.51	0.154
SIZE	6.23	0.160
CR	3.74	0.267
Mean VIF	5.49	
MODEL 3		
Variable	VIF	1/VIF
SIZE	7.10	0.141
CSP	5.89	0.170
DER	1.62	0.616
Mean VIF	4.87	

Source : Stata 14.2 processed results

Based on the multicollinearity test results, it can be seen that all variables in several models used in this study have Variance Inflation Factor (VIF) values smaller than 10. Therefore, it can be concluded that this study does not have multicollinearity problems between the independent variables.

Heteroscedasticity Test

In this study, because the regression model chosen is the Fixed Effect Model (FEM), the heteroscedasticity test uses the Modified Wald Test model. According to Gujarati (2003), the regression model will pass the heteroscedasticity test if it has a significance value > 0.05 .

Table 8. Heteroskedasticity Test

The Modified Wald Test	
MODEL 1	Sig.
Dependent Variable ROA	0.9997
Dependent Variable ROE	0.2650
MODEL 2	Sig.
Dependent Variable ROA	0.9987
Dependent Variable ROE	0.9480
MODEL 3	Sig.
Dependent Variable ROA	0.9986
Dependent Variable ROE	0.9477

Source : Stata 14.2 processed results

Based on the results of the heteroscedasticity test in the Table, it can be seen that the significance value in all models used in this study is greater than 0.05. Therefore, the heteroscedasticity test using the Modified Wald test method does not have a heteroscedasticity problem in the regression model.

Panel Data Regression Analysis

Table 9. Panel Data Regression Analysis

MODEL 1						
Variabel	ROA			ROE		
	Coef	Std.Err	P> t 	Coef	Std.Err	P> t
CSP	0,0152	0,0288	0,040	0,0010	0,0494	0,030
SIZE	0,1348	0,0287	0,000	0,2350	0,0492	0,000
F(15,62)	15,62			13,62		
Prob > F	0,0000			0,0000		
R-Squared Within	0,5563			0,5571		
MODEL 2						
Variabel	ROA			ROE		
	Coef	Std.Err	P> t 	Coef	Std.Err	P> t
CSP	0,1089	0,0588	0,041	0,2352	0,0968	0,020
CSP*CR	0,0554	0,0278	0,050	0,1161	0,0458	0,015
CR	-0,0160	0,0169	0,038	-0,0837	0,0278	0,004
SIZE	0,1415	0,0284	0,000	0,2676	0,0468	0,000
F(15,60)	15,41			13,32		
Prob > F	0,0000			0,0000		
R-Squared Within	0,5745			0,5639		
MODEL 3						
Variabel	ROA			ROE		
	Coef	Std.Err	P> t 	Coef	Std.Err	P> t
CSP	0,0223	0,0364	0,044	0,1219	0,0630	0,050
CSP*DER	-0,0661	0,0294	0,030	-0,1458	0,0508	0,007
DER	-0,0003	0,0254	0,992	-0,0984	0,0439	0,031

SIZE	0,1614	0.0279	0,000	0,2578	0,0483	0,000
F(15,60)	14,01			14,06		
Prob > F	0,0000			0,0000		
R-Squared Within	0,5647			0,5803		

Source : Stata 14.2 processed results

Based on Table 7, the test result of the coefficient of determination (r-squared within) for model 1 (ROA as the dependent variable) shows a value of 0.5563 means that the independent variables affect the dependent variable by 55.63%, while 44.37% is explained by other variables not used in this research model. In addition, model 1 (ROE as the dependent variable) has a coefficient of determination (r-squared within) of 0.5571, meaning that the independent variable affects the dependent variable by 55.71%, while 44.29% is explained by other variables not used in this research model.

In model 2 (ROA as the dependent variable) the coefficient of determination (r-squared within) of 0.5745 means that the independent variable affects the dependent variable by 57.45%, while 44.55% is explained by other variables not used in this research model. In addition, in model 2 (ROE as the dependent variable) has a coefficient of determination (r-squared) value of 0.5639, meaning that the independent variable affects the dependent variable by 56.39%, while 43.61% is explained by other variables not used in this research model.

Then, in model 3 (ROA as the dependent variable) the coefficient of determination (r-squared within) of 0.5647 means that the independent variable affects the dependent variable by 56.47%, while 43.53% is explained by other variables not used in this research model. Meanwhile, in model 3 (ROE as the dependent variable) has a coefficient of determination (r-squared within) of 0.5803, meaning that the independent variable affects the dependent variable by 58.03%, while 41.97% is explained by other variables not used in this research model.

In Table 7, it can also be seen that the Prob>F value of the regression model used has a value of 0.0000 less than 0.05 so it can be concluded that there is a simultaneous influence of the independent variable on the dependent variable.

Hypothesis Test (t Test)

The t test is a partial test conducted to find the effect of the independent variable on the dependent variable. Based on the table above, the results of regression analysis on hypothesis testing can be explained as follows:

1. Effect of Corporate Sustainability Performance (CSP) on Profitability (ROA and ROE)

Based on the regression analysis results in Table , it is found that CSP in model 1 (ROA as the dependent variable) has a p-value of $0.040 \leq 0.05$ with a coefficient value of 0.0152 with a positive sign. In addition, in model 1 (ROE as the dependent variable) CSP has a p-value of $0.030 < 0.05$ with a coefficient value of 0.0010 with a positive sign.

In model 2 (ROA as the dependent variable) CSP has a p-value of $0.041 \leq 0.05$ with a coefficient value of 0.1089 with a positive sign. In addition, in model 2 (ROE as the dependent variable) CSP has a p-value of $0.020 \leq 0.05$ with a coefficient value of 0.2352 with a positive sign.

Then, in model 3 (ROA as the dependent variable) CSP has a p-value of $0.044 \leq 0.05$ with a coefficient value of 0.0223 with a positive sign. In addition, in model 2 (ROE as the dependent variable) CSP has a p-value of $0.050 \leq 0.05$ with a coefficient value of 0.1219 with a positive sign.

Therefore, from the overall regression model used, it appears that Corporate Sustainability Performance (CSP) has a significant positive effect on profitability (with ROA and ROE proxies). So it can be concluded that hypothesis **H1** is accepted.

2. The Effect of Liquidity (CR) as Moderating Variable on the Relationship between Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

Based on the regression analysis results in the table, it is found that the interaction of Corporate Sustainability Performance with Current Ratio (CSP*CR) in model 2 (ROA as the dependent variable) has a p-value of $0.050 \leq 0.05$ with a coefficient value of 0.0554 with a positive sign. In

addition, in model 2 (ROE as the dependent variable) the interaction of Corporate Sustainability Performance with Current Ratio (CSP*CR) has a p-value of $0.015 \leq 0.05$ with a coefficient value of 0.1161 with a positive sign. From Model 2, it can be seen that the interaction of Corporate Sustainability Performance with current ratio as a moderating variable has a positive and significant sign on profitability (with ROA and ROE proxies). This means that liquidity with the Current Ratio proxy as a moderating variable can strengthen the relationship between CSP and profitability. So it can be concluded that hypothesis **H2** is accepted.

3. The Effect of Leverage on the Relationship between Corporate Sustainability Performance (CSP) and Profitability

Based on the regression analysis results in the table, it is found that the interaction of Corporate Sustainability Performance with Debt to Equity Ratio (CSP*DER) in model 3 (ROA as the dependent variable) has a p-value of $0.030 \leq 0.05$ with a coefficient value of -0.0661 with a negative sign. In addition, in model 3 (ROE as the dependent variable) the interaction of Corporate Sustainability Performance with Debt to Equity Ratio (CSP*DER) has a p-value of $0.007 \leq 0.05$ with a coefficient value of -0.1458 with a negative sign.

Therefore, from model 3 used, it can be seen that the interaction of Corporate Sustainability Performance with Debt to Equity Ratio (DER) as a moderating variable has a negative and significant sign on profitability (with ROA and ROE proxies). This means that leverage with the Debt to Equity Ratio proxy as a moderating variable can weaken the relationship between CSP and profitability. So it can be concluded that hypothesis **H3** is accepted.

Discussion

The Effect of Corporate Sustainability Performance (CSP) On Company Profitability

Based on the tests conducted, it is found that CSP significantly has a positive effect on profitability, meaning that the more the company's sustainability performance index is fulfilled, it will affect the increase in profitability. The results of this study are in line with stakeholder theory and legitimacy theory. Stakeholder theory emphasises that the success of the company is not only measured by financial performance, but also by how the company meets the needs and expectations of various interested parties (stakeholders) such as customers, employees, suppliers, communities, and shareholders. Companies that pay attention to economic, social and environmental impacts through the disclosure of sustainability reports can increase the legitimacy of their production activities from stakeholders. By presenting a positive image, the company can convince investors and stakeholders of its ability to survive in the long term. Therefore, good sustainability practices allow companies to establish more effective relationships with stakeholders, increase competitiveness, and ultimately improve financial performance (profitability).

This research is in accordance with research conducted by (Ningsih, 2022 and Gantino, 2016) which states that corporate sustainability performance has a positive influence on profitability. In line with this research, Gunawan & Yuanita (2018) also confirmed that CSP has an influence on ROA. However, this research contradicts research conducted by (Fatah & Haryanto, 2016; Inas & Mildawati, 2022) which states that corporate sustainability performance has no influence on the company's ROA and ROE. It can be concluded that, the implementation of corporate sustainability performance can increase the company's ROA and ROE.

The Effect of Liquidity (CR) as Moderating Variable on the Relationship between Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

Based on the tests conducted, it was found that liquidity with Current Ratio (CR) proxy as a moderating variable is significantly able to strengthen the relationship between Corporate Sustainability Performance (CSP) and profitability. The results of this study are in line with the Trade-Off theory which states that high liquidity will have a positive impact on the company's financial performance, because the higher the current ratio (liquidity proxy), the greater the company's ability to meet short-term corporate financial obligations. In addition, liquidity can also function as a reserve that

helps companies balance the costs and benefits of sustainability performance investments made by the company. With sufficient liquidity, companies can implement sustainability practices more effectively without having to sacrifice short-term profits.

The results of this study support the results of research conducted by Taha (2023) which states that liquidity as a moderating variable is able to strengthen the relationship between corporate sustainability performance and corporate profitability.

The Effect of Leverage (DER) as Moderating Variable on the Relationship between Corporate Sustainability Performance (CSP) and Profitability (ROA and ROE)

Based on the tests conducted, it was found that leverage with the proxy Debt to Equity Ratio (DER) as a moderating variable is significantly able to weaken the relationship between Corporate Sustainability Performance (CSP) and profitability. The results of this study are in line with the trade-off theory which states that a company can be said to be optimal when the company is able to balance the benefits and costs of using debt. The use of debt will cause interest expense which can be used as a way to save taxes. However, the use of greater debt will cause financial difficulties to bankruptcy in the company.

The leverage ratio shows the proportion of the use of debt compared to the capital owned by the company in financing its investment. Therefore, the higher this ratio, the higher the proportion of the company's debt usage. In this study, it can be seen that the higher the leverage ratio, the company will prioritise its funds to pay debts compared to improving the company's sustainability performance which will have a positive impact in the long term on profitability. Conversely, companies with low leverage levels will be more flexible in utilising company finances to invest in the company's sustainability performance without being burdened with heavy debt obligations. Therefore, leverage can weaken the relationship between CSP and profitability, in accordance with the principle of trade-off theory that explains the trade-off between the benefits of debt and the cost of debt.

This research is in line with research conducted by Fauzi et al. (2017) which found that leverage is significantly able to moderate the relationship between corporate sustainability performance and corporate financial performance. However, it is contrary to research conducted by Emilia (2018), which found that leverage is not able to moderate the relationship between CSP and company profitability.

Control Variables

Based on tests carried out from the entire regression model used, it is found that company size used as a control variable has a positive and significant effect on profitability. The results of the study are in line with research conducted by Adria & Susanto (2020) which states that company size has a significant positive effect on profitability.

CONCLUSION

According to the results of data analysis and previous discussion, the following conclusions can be drawn:

1. Corporate Sustainability Performance (CSP) has a positive and significant effect on the profitability of LQ45 index companies listed on the Indonesia Stock Exchange (IDX). This means that the more fulfilled the company's sustainability performance index, the company will have a positive impact on the profitability obtained by the company.
2. Liquidity as measured by Current Ratio (CR) as a moderating variable is significantly able to strengthen the influence of Corporate Sustainability Performance (CSP) on the profitability of LQ45 index companies listed on the Indonesia Stock Exchange (IDX). In other words, when companies have better liquidity (measured by current ratio), the impact of corporate sustainability performance (CSP) on profitability will be stronger.
3. Leverage as measured by Debt to Equity Ratio (DER) as a moderating variable significantly weakens the influence of Corporate Sustainability Performance (CSP) on the profitability of LQ45 index companies listed on the Indonesia Stock Exchange (IDX). The higher the leverage,

the more the company will prioritise using its funds to repay debt rather than improving its sustainability performance. This reduces the company's ability to implement sustainability practices and benefit from CSP on its profitability.

Based on the results of this study, it is hoped that companies can further improve the company's sustainability performance because this will not only improve the company's positive image but can also increase the company's profitability. In addition, it is hoped that companies will pay more attention to the company's liquidity and leverage. The company can be said to be running optimally when the company is able to balance the costs of using debt with the benefits that will be received. The company needs an optimal target leverage ratio so that it can minimise the risk of bankruptcy and increase the benefits that the company will get when using debt.

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