International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The Role Of Corporate Sustainability Report (CSR) In Mediating The Effect Of Efficiency And Leverage Strategies On The Financial Performance Of PT Wijaya Karya Tbk (Study: IDX-Indexed Infrastructure Companies For The 2020-2024 Period)

Deva Ayu Setyani[1], Suci Atiningsih[2]

[1]Accounting Study Program, BPD University of Central Java
[2]Accounting Study Program, BPD University of Central Java

Abstract

This study aims to analyze the role of Corporate Sustainability Reports (CSR) in mediating the influence of Efficiency and Leverage Strategies on a company's Financial Performance. The population in this study includes all infrastructure sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 research period, which is based on the established criteria totaling 47 companies. Meanwhile, the number of samples used after the selection process and removal of outliers was 225 observation data. This calculation was derived from 47 companies over 5 years (2020–2024), so the total initial data was 235, but after testing and removing 10 data, 225 research samples remained. The research objects were infrastructure companies indexed on the Indonesia Stock Exchange with a focus on infrastructure companies during the 2020–2024 period in Indonesia. This study used a quantitative approach by using secondary data obtained from annual financial reports and company sustainability reports. The sampling technique used was purposive sampling, namely sample selection based on certain criteria in accordance with the research objectives. This study found that efficiency strategies (BOPO) had no significant effect on financial performance, while leverage (DER) had a negative and significant effect. Corporate Sustainability Report (CSR) disclosure positively impacted financial performance. CSR also acts as a mediator, strengthening the effect of leverage on financial performance. Overall, financial risk management and sustainability are crucial for improving the performance of infrastructure companies.

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Keywords : Efficiency Strategy, Leverage, Corporate Sustainability Report, Financial Performance, Infrastructure Companies.

INTRODUCTION

Construction companies play a central role in the development of physical facilities and infrastructure that support public interests, in line with national development plans and applicable regulations. Globally, the industry continues to thrive, with average annual growth reaching 4.5% in 2021–2023, driven by post-pandemic infrastructure investment (Khorunisa & Hermuningsih, 2023; Deloitte, 2023). In Indonesia, the construction sector contributes approximately 10% to national GDP and creates millions of jobs, despite facing challenges of economic volatility (Ayu & Hasan, 2020; Statistics Indonesia, 2024). The relevance of this topic is not only practical—in distributing income equitably—but also scientific, as financial performance is a key indicator of business sustainability amidst global competition (Winarno, 2019).

A specific phenomenon has emerged in state-owned construction companies such as PT Wijaya Karya Tbk (WEGE), which has experienced significant financial pressure in the past 2–3 years. Based on the 2020–2024 financial statements, total assets increased to IDR 75 trillion in 2022, but net profit plummeted to a loss of IDR 7.82 trillion in 2023 and IDR 2.51 trillion in 2024, accompanied by an 18.6% decline in revenue in the first quarter of 2024 to IDR 3.53 trillion (PT Wijaya Karya Tbk Financial Report, 2024; CNBC Indonesia, 2024). Return on Assets (ROA) sharply corrected from 0.31% (2021) to -11.86% (2023), reflecting the inefficiency of converting assets into profits despite debt reduction (Saragih et al., 2025; Auliyah & Saleh, 2024). This condition emphasizes the vulnerability of state-owned construction companies to high operational costs and excessive leverage, which threaten business continuity in the global market.

Previous research has explored the drivers of financial performance in the construction sector, focusing on operational efficiency (measured by BOPO) and leverage (measured by DER). Diantini et al. (2020) found that low BOPO increases profitability through cost control, while Azalia et al. (2022) showed that optimal DER supports asset expansion without depressing ROA. Similar studies in the context of state-owned enterprises (SOEs) confirm that strategic efficiency accelerates productivity (Ariyandi, 2025), and controlled leverage minimizes bankruptcy risk (Agatha, 2024).

However, empirical results show striking inconsistencies. Jatmiko (2025) reports a negative impact of BOPO on financial performance in manufacturing companies, in

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contrast to Fasya (2025) who finds a positive effect in the service sector. For leverage, they identify a negative effect of DER on ROA due to interest expense, while Pujiastuti (2025) highlights its positive benefits in financing large projects. Even the role of Corporate Sustainability Reports (CSR) as a discloser of environmental-social information presents a contradiction: a positive effect on profitability, but Suaidah et al. (2020) found a significant negative impact. Limitations of this study lie in the lack of CSR mediation analysis and the specific context of post-2023 construction SOEs, which ignores current debt and efficiency dynamics (Yuliani & Triyono, 2025; Liswatin, 2022).

The research gap is increasingly apparent due to the lack of studies examining the mediation of CSR in the efficiency-leverage relationship on ROA in Indonesian state-owned construction companies, where the inconsistencies in previous findings have not been empirically resolved. Therefore, the formulation of this research problem is: (i) How does efficiency strategy (BOPO) affect financial performance (ROA)? (ii) How does leverage (DER) affect ROA? (iii) How do BOPO and DER simultaneously affect ROA? (iv) Does CSR mediate the effect of BOPO on ROA? (v) Does CSR mediate the effect of DER on ROA?

This study aims to analyze the partial and simultaneous effects of efficiency and leverage strategies on the financial performance of PT Wijaya Karya Tbk for the 2020–2024 period, as well as to examine the mediating role of CSR—a novelty compared to previous studies such as Yuliani and Triyono (2025) that failed to prove full mediation. The urgency of this current research is driven by the post-2023 state-owned enterprise financial crisis, where understanding CSR mediation is crucial for sustainability. Theoretically, these findings enrich the corporate finance literature with a contextual mediation model; practically, they provide recommendations for WEGE management, investors, and regulators on optimizing efficiency, debt management, and CSR reporting to enhance competitiveness (Keandre et al., 2024).

METHODOLOGY

This study adopts a quantitative approach to test the causal relationship between variables through statistical analysis of secondary numerical data, specifically the effect of efficiency strategies (BOPO) and leverage (DER) on financial performance (ROA) with the mediation of Corporate Sustainability Report (CSR). This approach was chosen because of its ability to produce objective empirical evidence and strong generalizability, as applied in similar studies on infrastructure companies (Sugiyono, 2022; Judijanto et al., 2024). The explanatory research design with panel data

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regression allows for simultaneous and partial hypothesis testing, in line with current practices in corporate finance (Ghozali, 2021; Fahlevi et al., 2025).

The study population included all infrastructure and construction sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The sample was determined through purposive sampling with strict criteria: companies published complete financial reports, ROA/BOPO/DER data were available, and Corporate Sustainability Reports (CSR) were consistently disclosed without delisting. These criteria ensured data representativeness and quality, resulting in PT Wijaya Karya Tbk as the primary focus due to its relevance to the significant post-2023 loss phenomenon (Nugroho & Maryanti, 2025; Ghozali, 2021). This technique is commonly used for SOE financial studies to control selection bias (Irawan et al., 2025).

The research instrument consists of secondary data extracted operationally from annual financial reports and CSR, with the following definitions: ROA = Net Profit/Total Assets (Y); BOPO = Operating Expenses/Operating Income (X1); DER = Total Debt/Total Equity (X2); and CSR Disclosure Index = number of disclosed GRI items/total items (Z, score 0–1). These measurements have been validated in recent literature due to their reliability in measuring profitability, efficiency, leverage, and sustainability disclosure (Fauzy et al., 2023; Lusmeida & Amelia, 2023). Validity is achieved through official IDX sources and annual reports, meeting empirical replicability standards.

The research procedure began with the collection of documentary data from www.idx.co.id, the company website, and CSR reports for the 2020–2024 period, followed by data cleaning to remove outliers or missing values. Data were processed using Stata software for panel regression model selection (Chow, Hausman, and Lagrange Multiplier tests), classical assumption tests (Jarque-Bera normality, VIF multicollinearity, Glejser heteroscedasticity, Wooldridge autocorrelation), and final estimation (Sudaryono, 2021). These stages ensure a logical sequence from descriptive to inferential, consistent with the panel analysis protocol (Emzir, 2022).

Data analysis included descriptive statistics (mean, standard deviation, min-max) for variable description, followed by panel data multiple linear regression: $ROA_{it} = \alpha + \beta1\ BOPO_{it} + \beta2\ DER_{it} + \varepsilon_{it}$ (direct model), and a stepwise mediation model (CSR as an intervening factor) with the Sobel test for significance ($Z > 1.96$). The t-test (partial, $p < 0.05$), F-test (simultaneous), and R^2 completed the hypothesis testing, using Stata for robust standard errors to address heteroscedasticity (Ghozali, 2021; Ariyandi, 2025). This approach accurately measures CSR mediation in the Indonesian

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infrastructure context.

This research adheres to ethical principles by relying on open public data from the IDX and companies, without the involvement of human participants, thus requiring no informed consent or formal ethical clearance. Confidentiality is maintained through non-specific company anonymity except for public data, while data integrity is cross-verified between sources to prevent plagiarism or manipulation (Sugiyono, 2022; Judijanto et al., 2024). This methodological transparency allows for full replication by other researchers, in line with international journal standards.

RESULTS AND DISCUSSION

Research Data Description

This study uses secondary data obtained from the financial reports of infrastructure sector companies listed on the Indonesia Stock Exchange during the research period.The sample selection was conducted using a purposive sampling method with several predetermined criteria. Based on the results of the sample selection, the following details were obtained:

Table 1. Details of the Research Sample

No.	Criteria	Amount
1	Infrastructure companies listed on the IDX (2020–2023)	**70**
2	No financial reports for 2020–2023	14
3	Does not provide research variable data	9
	Number meeting research criteria	**47**
	Research Year 2020-2024	**5**
	Total	**235**
	Data outliers	**10**
	Total Sample	**225**

Based on these criteria, 47 companies met the research criteria. Over a five-year study period (2020–2024), a total of 235 observational data sets were obtained. After identifying outliers, 10 were removed from the sample, resulting in a total of 225 samples.

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E-ISSN : 2964-0865
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Descriptive Statistics

Descriptive statistics are used to provide an overview of the characteristics of research data, including the average value (mean), standard deviation, minimum value, and maximum value of each research variable.

Table 2. Descriptive Statistics of Research Data

Variables	*Mean*	*Std. Dev*	*Minimum*	*Maximum*
ROA	0.0531324	0.0628121	0.0001677	0.4386358
BOPO	0.5282029	0.3902571	0.0000000	1.9526840
DER	1.6989350	2.9596490	0.0069059	25.7598000
CSRDI	0.4727273	0.0463135	0.3846154	0.5934066

Based on the descriptive statistics, the ROA variable has an average value of 0.0531324, indicating that the average company in the sample is able to generate a profit of 5.31% of its total assets. The minimum value of 0.0001677 for WIKA in 2022 and the maximum value of 0.4386358 for ACST in 2020 indicate that the company's profitability level is quite varied. The BOPO variable has an average value of 0.5282029 with a standard deviation of 0.3902571. This indicates that the level of operational efficiency of the companies in the sample is quite diverse. The maximum BOPO value of 1.9526840 indicates that there is a company with a relatively high level of operating expenses compared to the company's operating income, namely TGRA in 2020. The DER variable has an average value of 1.6989350 with a standard deviation of 2.9596490. The minimum value of 0.0069059 occurred in KBLV companies in 2021 and the maximum value of 25.7598000 LCKM in 2023, indicating that leverage levels among companies in the sample also vary, although not as extreme as the previous output. The CSRDI variable has an average value of 0.4727273 with a standard deviation of 0.0463135. This indicates that the level of disclosure of companies' Corporate Sustainability Reports is relatively stable.

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Regression Model Selection Test Results

Chow Test

Table 3. Output of Chow Test Results

ROA			
Effect Test	**Statistics**	**Prob**	**Result**
Cross-Section Chi-Square	4.68	0	*Fixed Effect Model*

The Chow test results show a probability value of 0.000, which is lower than the 0.05 significance level, so the Fixed Effect Model (FEM) was chosen. This indicates that the fixed effects model is more appropriate than the common effects model in this study's panel data analysis.

Hausman test

Table 4. Hausman Test Result Output

ROA			
Effect Test	**Statistics**	**Prob**	**Result**
Cross-Section Chi-Square	3.22	0	*Random Effect Model*

Based on the Hausman test results, a probability value of 0.000 was obtained, which is less than 0.05, so the model used was the Fixed Effect Model. These results indicate that the REM model is more appropriate than the random effects model.

Lagrange Multiplier Test

Table 5. Output of Lagrange Multiplier Test Results

ROA			
Test Summary	**Statistics**	**Prob**	**Result**
Breusch-pagan	72.90	0	*Random Effect Model*

The results of the Lagrange Multiplier test show a probability value of 0.000 so that the model used in this study is the Random Effect Model as the best model in panel data analysis.

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Classical Assumption Test

Classical assumption tests were conducted to ensure that the regression model used in the study met the basic assumptions of regression analysis so that the estimated results could be used appropriately in hypothesis testing. Classical assumption tests in this study included normality, multicollinearity, and heteroscedasticity tests.

1. Normality Test

The normality test aims to determine whether the data in a regression model has a normal distribution. A good regression model is one that has a normal residual distribution.

Table 6. Output of Normality Test Results

Normality Test	Probability	Conclusion
Skewness/Kurtosis Test	0.0000	Abnormal
Shapiro–Wilk Test	0.0000	Abnormal

Based on the results of the normality test using the Shapiro–Wilk test and the Skewness/Kurtosis test, the model residuals show a probability value less than 0.05, indicating that the residuals are not normally distributed. However, in panel data regression analysis, residual non-normality is not always a serious problem, especially when the number of observations is relatively large. Furthermore, this study uses robust standard errors, so the coefficient estimates can still be used validly.(Millo, 2017).

2. Multicollinearity Test

A multicollinearity test is performed to determine whether there is a strong relationship or correlation between the independent variables in a regression model. A good regression model is one that does not have a strong relationship between the independent variables.

Table 7. Output of Multicollinearity Test Results

Variables	*VIF*	*Information*
BOPO	1.01	There is no multicollinearity
DER	1.01	There is no multicollinearity
CSRDI	1.00	There is no multicollinearity
Mean VIF	**1.01**	Very stable model

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Based on the results of the multicollinearity test, the Variance Inflation Factor (VIF) value for each variable, namely BOPO, is 1.01, DER is 1.01, and CSR is 1.00. This value is smaller than the general limit of VIF <10. In addition, the Mean VIF value is 1.01, which indicates that the research model has a very good level of stability. Thus, it can be concluded that there are no symptoms of multicollinearity in the regression model of this study, so that the independent variables used in the study are worthy of further analysis.

3. Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is inequality in the variance of the residuals in a regression model. A good regression model is one that does not experience heteroscedasticity.

Table 8. Output of Heteroscedasticity Test Results

Test	Statistics	Probability	Conclusion
Modified Wald Test	7,554	0.0000	Heteroscedasticity occurs

Based on the test results using the Modified Wald Test, a statistical value of 7.554 was obtained with a probability value of 0.0000. This probability value is smaller than the 0.05 significance level, so it can be concluded that heteroscedasticity occurs in the regression model of this study. The presence of heteroscedasticity indicates that the residual variance is not constant in each observation. Therefore, to address the problem of heteroscedasticity in this study, a more robust estimation method was used so that the results of the regression analysis can still provide unbiased estimates.

Hypothesis Test Results

The results of the t-test are used to determine the influence of each independent variable on the dependent variable partially.

Table 9. Output of Hypothesis Test Results

Variables	Coefficient	Std. Error	z-Statistic	*Prob.*	Conclusion
BOPO	0.0235059	0.0189306	1.24	0.214	Not significant

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DER	-0.0020928	0.0009993	-2.09	0.036	Significant negative
CSRDI	0.2604397	0.1207102	2.16	0.031	Significant positive

Based on the results of hypothesis testing using a Random Effect Model with robust standard error, the BOPO variable has a probability value of 0.214, thus it does not significantly influence the company's financial performance. The DER variable has a coefficient value of -0.0020928 with a probability of 0.036, thus having a negative and significant effect on ROA. Meanwhile, the CSRDI variable has a coefficient value of 0.2604397 with a probability of 0.031, thus having a positive and significant effect on ROA.

Mediation Test Results

Table 10. Output of Stage 1 Mediation Test Results (The Effect of BOPO and DER on CSRDI)

Variables	***Coefficient***	***Std. Error***	***z-Statistic***	***Prob.***	***Conclusion***
BOPO	-0.0127817	0.0094918	-1.35	0.178	Not significant
DER	0.0027888	0.0012418	2.25	0.025	Significant positive

Based on the results of the first stage, BOPO had no significant effect on CSRDI. Conversely, DER had a positive and significant effect on CSRDI. This indicates that the higher a company's leverage, the higher the level of Corporate Sustainability Report disclosure.

Table 11. Output of Stage 2 Mediation Test Results (The Effect of BOPO and DER on ROA without Mediator)

Variables	***Coefficient***	***Std. Error***	***z-Statistic***	***Prob.***	***Conclusion***
BOPO	0.0216040	0.0186758	1.16	0.247	Not significant
DER	-0.0016460	0.0010558	-1.56	0.119	Not significant

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In the model without a mediator, neither BOPO nor DER significantly affected ROA. Therefore, the direct relationship between the two independent variables and financial performance has not been proven significant at this stage.

Table 12. Output of Stage 3 Mediation Test Results (The effect of BOPO and DER and CSRDI on ROA)

Variables	*Coefficient*	*Std. Error*	*z-Statistic*	*Prob.*	*Conclusion*
BOPO	0.0235059	0.0189306	1.24	0.214	Not significant
DER	-0.0020928	0.0009993	-2.09	0.036	Significant negative
CSRDI	0.2604397	0.1207102	2.16	0.031	Significant positive

Based on the partial test results on the Random Effect model with robust standard error, the BOPO variable has a coefficient of 0.0235059 with a z-statistic value of 1.24 and a probability of 0.214. The probability value is greater than the significance level of 0.05 indicating that BOPO does not have a significant effect on ROA, so changes in the level of operational efficiency proxied by BOPO have not been able to explain changes in company profitability. Meanwhile, the DER variable has a coefficient of -0.0020928 with a z-statistic value of -2.09 and a probability of 0.036, which is smaller than 0.05, so it can be concluded that DER has a negative and significant effect on ROA. This indicates that the higher the level of company leverage as measured by the Debt to Equity Ratio, the company's profitability tends to decrease. Furthermore, the CSRDI variable has a coefficient of 0.2604397 with a z-statistic value of 2.16 and a probability of 0.031, which is also smaller than 0.05, so that CSRDI has a positive and significant effect on ROA.

F Test (Simultaneous)

The F test is used to determine whether the independent variables simultaneously or together have an influence on the dependent variable in the research model.

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Table 13. Output of F-Test Results (Simultaneous)

Statistics	Mark
Wald Chi² (3)	6.58
Prob > Chi²	0.0864
Information	Not Significant

The simultaneous test using the Wald Chi-square test showed a value of 6.58 with a probability of 0.0864. This probability value is greater than 0.05, indicating that the independent variables simultaneously do not significantly influence financial performance at the 5% significance level. However, at the 10% significance level, the model can still be considered significant.

Coefficient of Determination Test (R2)

The coefficient of determination (R^2) is used to determine how much the independent variable is able to explain the variation in changes in the dependent variable in the research model.

Table 14. Output of Determination Coefficient Test Results

Model	R-squared
Overall	0.0730

Based on the analysis results, an R-squared value of 0.0730 was obtained. This indicates that the independent variables in this study, namely BOPO, DER and CSRDI, are able to explain variations in changes in the company's financial performance (ROA) by 7.30%, while the remaining 92.70% is influenced by other variables outside the research model that are not included in this study.

DISCUSSION

The Effect of BOPO on Financial Performance (ROA)

Based on the results of regression testing using a Random Effect Model with robust standard error, the efficiency strategy variable, proxied by BOPO, has a coefficient of 0.0235059 with a probability value of 0.214. This probability value is greater than the 0.05 significance level, so it can be concluded that the efficiency strategy does not significantly influence the company's financial performance, proxied

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by Return on Assets (ROA). The results of this study indicate that the level of operational efficiency reflected in the BOPO ratio has not been able to provide a significant impact on improving the financial performance of infrastructure sector companies. Theoretically, BOPO is used to measure the level of company efficiency in managing operational expenses against operating income. A lower BOPO value should indicate a company's increasing efficiency in carrying out its operational activities, thus increasing company profits. In other studies, BOPO does not significantly influence a company's financial performance directly, but operational efficiency can increase profitability (ROA), which then has an impact on improving the company's financial performance indirectly. In other words, operational efficiency can influence financial performance through increasing profitability as an intermediary variable.(Kurniasih & Akhmadi, 2024).

However, in the context of the infrastructure sector, the relationship between operational efficiency and profitability is not always straightforward. Infrastructure companies generally have different business characteristics than other sectors, namely, they are capital-intensive and require large initial investments for project development and fixed asset procurement. Furthermore, many infrastructure projects have relatively long payback periods, so the impact of operational efficiency on company profits is not always visible in the short term. Furthermore, infrastructure companies are often involved in large-scale projects that are influenced by external factors such as government policies, macroeconomic conditions, interest rates, and the stability of project financing. These factors can influence a company's financial performance more dominantly than operational efficiency itself. Therefore, the results of this study indicate that improvements in operational efficiency, as measured by the BOPO (Operating Cost of Goods Sold) is not strong enough to explain variations in the financial performance of companies in the infrastructure sector.(Dwi Pratiwi, 2025)This shows that a company's financial performance is not only influenced by operational cost efficiency, but also by various other factors such as financing structure, long-term investments, and industry conditions.

The Effect of DER on Financial Performance (ROA)

The analysis results show that leverage, proxied by the Debt to Equity Ratio (DER), has a coefficient of -0.0020928 with a probability value of 0.036. Therefore, it can be concluded that leverage has a negative and significant effect on a company's financial performance. The negative coefficient indicates that an increase in leverage tends to be followed by a decrease in the company's profitability. This means that the

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greater the proportion of debt used by a company in its capital structure, the greater the potential for a decline in the company's financial performance, as reflected in ROA. This is in line with research conducted by(Febriana, 2026)stated that an increase in the debt-to-equity ratio will result in a decrease in the return on assets. Likewise, a decrease in the debt-to-equity ratio will result in an increase in the return on assets generated. Theoretically, the use of debt in the capital structure can provide benefits in the form of additional funding sources for companies to expand operational activities and investments. However, on the other hand, the use of debt also increases financial risk because the company is obliged to pay interest and principal debt within a certain period. If a company is unable to manage debt effectively, the resulting interest expense can reduce the company's net profit. This condition will have a direct impact on the company's return on assets. In the infrastructure sector, the use of debt is often a primary source of financing because infrastructure projects require very large initial investments. Many infrastructure companies use debt-based financing to support the construction of projects such as toll roads, telecommunications, ports, and energy.

However, if the leverage level is too high, the company will face greater financial pressure, especially in unstable economic conditions. High interest payments can reduce the company's ability to generate profits, thereby deteriorating its financial performance. Therefore, the results of this study indicate that capital structure management is a critical factor in maintaining the stability of a company's financial performance. Companies need to consider the balance between debt and equity to effectively manage financial risks.(Maharani & Ludvy, 2025).

The Influence of Corporate Social Responsibility on Financial Performance

Based on the regression test results, the Corporate Sustainability Report Disclosure Index (CSRDI) variable has a coefficient of 0.2604397 with a probability value of 0.031, thus it can be concluded that Corporate Sustainability Report disclosure has a positive and significant effect on the company's financial performance. The positive coefficient indicates that the higher the level of Corporate Sustainability Report disclosure, the higher the company's financial performance as reflected in ROA. This is in accordance with research conducted by(Suaidah, 2020)The results of the regression analysis indicate that economic disclosure in sustainability reports has a positive and significant impact on ROA, meaning that the higher the level of economic information disclosure in a sustainability report, the higher the company's profitability. This is

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because transparency of economic information can increase investor and stakeholder confidence, thus improving a company's financial performance.

These results align with stakeholder theory, which states that companies are not only responsible to shareholders but also to various stakeholders, such as the community, government, consumers, and the environment. By increasing transparency and accountability through sustainability reporting, companies can gain greater trust from stakeholders.(Fitriana & Khomsiyah, 2025). In addition, the disclosure of the Corporate Sustainability Report is also related to legitimacy theory, which explains that companies strive to gain legitimacy from society by demonstrating that their business activities have taken social and environmental aspects into account. Companies that have a good level of sustainability disclosure tend to have a more positive reputation in the eyes of investors and the public. A good reputation can increase investor confidence, making it easier for companies to gain access to funding sources. In the long term, sustainability practices can also improve the company's operational efficiency, reduce environmental risks, and strengthen relationships with the surrounding community. These things can ultimately make a positive contribution to improving the company's financial performance. Thus, the results of this study indicate that the disclosure of the Corporate Sustainability Report not only provides benefits from the corporate social responsibility side, but also has the potential to improve the company's financial performance.

The Role of CSR in Mediating the Effect of BOPO on Financial Performance

The results of the mediation test indicate that the efficiency strategy proxied by BOPO does not have a significant effect on the Corporate Sustainability Report with a probability value of 0.178. In addition, BOPO also does not have a significant effect on the company's financial performance proxied by Return on Assets (ROA), both before and after the Corporate Sustainability Report variable is included in the regression model. These results indicate that the level of company operational efficiency does not have a strong relationship with the level of disclosure of the Corporate Sustainability Report or the company's financial performance.

Thus, the Corporate Sustainability Report cannot act as a mediating variable in the relationship between operational efficiency strategies and a company's financial performance. This means that changes in the level of operational efficiency reflected in the BOPO ratio do not directly or indirectly affect ROA through sustainability report disclosure. The results of this study are in line with research conducted by Nada

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Khamilia and Wahyudin Nor, which stated that a company's level of operational efficiency does not automatically determine the extent of disclosure of sustainability practices in its sustainability report. Conceptually, the Corporate Sustainability Report is a form of reporting related to a company's social and environmental responsibilities, which is usually influenced by other factors such as company policies, regulatory pressures, stakeholder demands, and the company's commitment to sustainability practices. Therefore, the level of operational efficiency reflected in the BOPO ratio is not necessarily the main factor determining whether a company will increase its sustainability report disclosure. In addition, Corporate Sustainability Report disclosure is also often influenced by factors such as the company's reputation, company size, and the company's communication strategy to the public. Therefore, the Corporate Sustainability Report does not act as an intervening variable in the relationship between operational efficiency strategies and a company's financial performance.

The Role of CSR in Mediating the Effect of DER on Financial Performance

The results of the mediation test indicate that leverage, as proxied by the Debt to Equity Ratio (DER), has a positive and significant effect on the Corporate Sustainability Report with a probability value of 0.025. This indicates that companies with higher levels of leverage tend to increase the level of disclosure of the Corporate Sustainability Report as a form of transparency to stakeholders. Furthermore, the analysis results also show that the Corporate Sustainability Report has a positive and significant effect on the company's financial performance, as proxied by Return on Assets (ROA). This indicates that companies with higher levels of sustainability report disclosure tend to gain greater trust from stakeholders, thus contributing to improving the company's financial performance. This is in line with research conducted by(Alif & Habibie, 2025)In general, CSR can increase ROA through improved reputation, investor trust, and good relationships with stakeholders, while leverage can increase or decrease ROA depending on how the company utilizes debt to generate profits.

Furthermore, the test results also show that DER remains significantly influential on ROA after the Corporate Sustainability Report variable is included in the regression model. Based on Baron and Kenny's (1986) approach, this condition indicates that the Corporate Sustainability Report acts as a partial mediation variable in the relationship between leverage and corporate financial performance. Thus, the effect of leverage on financial performance occurs not only directly on ROA but also indirectly through the Corporate Sustainability Report as a mediator variable. This finding suggests that

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companies with high levels of leverage tend to increase transparency through sustainability report disclosures as an effort to gain legitimacy and maintain investor and creditor trust.(Christiaan, 2022)This increased transparency can ultimately contribute to improving the company's financial performance, as reflected in its Return on Assets (ROA).

CONCLUSION

This study concludes that efficiency strategies, measured by BOPO, have no significant effect on ROA financial performance in BEI infrastructure companies for the 2020-2024 period, while leverage (DER) has a negative and significant effect, indicating the financial risk of debt dependence in capital-intensive sectors. Corporate Sustainability Report disclosure has a positive and significant effect on ROA, with a partial mediation role in the relationship between DER and ROA, but does not mediate the effect of BOPO. Simultaneously, the independent variables only explain 7.3% of the variation in ROA, indicating the dominance of external factors such as government policies and macroeconomic conditions in determining infrastructure profitability.

The limitations of this study lie in the use of secondary data from the IDX, which is susceptible to reporting bias, and the volatile post-pandemic analysis period. Therefore, generalizability is limited to the Indonesian context. Future research is recommended to expand the multi-sector sample, include moderating variables such as corporate governance, and adopt mixed methods for qualitative triangulation. Practically, the management of infrastructure companies like PT Wijaya Karya needs to optimize their low-leverage capital structure, improve the quality of GRI-based CSR disclosures to build investor confidence, and diversify non-debt funding sources to restore profitability amidst global challenges.

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