The Impact of CSR Fund on the Company Value with Profitability as Moderating Variable on Transportation Company Sector

Saida Ifa Juliyanti[1*], Farhan Najib[2], Hafizha Nurul Qolby[3], Adelia Rahayu[4], Meisya Syakira Nursetya[5] , Velisa Stevannie[6], Syti Sarah Maesaroh[7]

[1234567] Digital Business, Universitas Pendidikan Indonesia, Tasikmalaya, Indonesia.

*Email: saidaifajuliyanti@upi.edu

Abstract. This study investigates the impact of Corporate Social Responsibility (CSR) funds on company value in the Indonesian transportation sector, with profitability as a moderating variable. The objective of the research is to explore whether CSR investments influence company value and how profitability moderates this relationship. Using data from several Indonesian transportation companies, the study analyzes the connection between CSR spending, profitability, and company value. The results indicate that CSR funds do not have a significant effect on company value, and profitability does not significantly moderate this relationship. These findings suggest that, within the context of the Indonesian transportation sector, CSR spending may not directly translate into increased company value, and the role of profitability in enhancing the effect of CSR is limited. Suggestion for further researchers is expected to use other financial ratios, use different moderating variables, and use different research periods.

Keywords: csr, company value, profitability, transport companies, roe.

Introduction

Corporate Social Responsibility (CSR) has become a crucial issue in modern business management, marking a shift from purely profit-driven goals to a broader commitment that includes social and environmental contributions (Nandemar & Amiruddin, 2020). Companies increasingly recognize that they can no longer focus solely on the "single bottom line" of economic performance, measured only by financial outcomes, but must also account for their social and environmental impacts (Wibisono, 2007). The concept of CSR extends beyond regulatory compliance and corporate image enhancement, emphasizing the positive role businesses can play within society and the environment. This shift in perspective reflects an understanding that a company's presence in a community has both direct and indirect effects on the external environment, potentially influencing it in both positive and negative ways. Striving for a balanced approach to economic, social, and environmental responsibilities can be effectively achieved through the implementation of CSR practices.

In the transportation industry, sustainability and social responsibility are increasingly seen as essential factors, given the significant environmental and social impacts of operations, such as gas emissions, fossil fuel consumption, and potential risks to public health and safety. Companies in this sector are closely connected to public use, making customer loyalty, employee well-being, environmental care, and relationships with influential stakeholders top priorities (Sholihah & Nuraina, 2013). Therefore, implementing CSR in this industry is expected not only to mitigate negative impacts but also to provide added value that supports long-term profitability. CSR is anticipated to boost customer loyalty, strengthen relationships with stakeholders, and improve the company's reputation within the community.

In Indonesia, the importance of CSR has been reinforced by government regulations, particularly with the enactment of Law No. 40/2007 on Limited Liability Companies, which encourages companies to integrate CSR practices into their business operations, promoting sustainable development across various sectors (Manurung, 2016). This regulation underscores the Indonesian government's commitment to fostering a balance between economic growth and environmental sustainability (Suhartini et al., 2024). In industries such as transportation, where operational activities significantly impact the environment, CSR implementation is essential to reduce negative effects and support long-term profitability and sustainability.

The integration of CSR practices not only addresses social and environmental concerns but also plays a critical role in enhancing company value. Company value, or firm value, represents the overall worth of a business as perceived by investors and stakeholders, reflecting its financial health, stability, and growth potential (Irawan & Kusuma, 2019). In the transportation sector, where environmental and social impacts are particularly pronounced, CSR can be a strategic tool to differentiate companies from competitors and enhance their perceived value (Dupire & M'Zali, 2023). Additionally, profitability functions as a moderating variable in this relationship, as a company's profitability can influence the extent to which CSR efforts impact firm value. Return on Equity (ROE) is one common measure of profitability, representing the efficiency with which a company uses its equity to generate profit (Brigham & Houston, 2016). Based on these considerations, this study proposes the following hypotheses:

H1: CSR funds have a positive effect on firm value in the transportation sector.
H2: Profitability strengthens the influence of CSR funds on firm value in the transportation sector.

Previous studies on the relationship between CSR and company value have shown mixed results. Pratama and Serly (2024) found that Corporate Social Responsibility (CSR) significantly impacts company value when measured by Net Profit Margin (NPM). Similarly, Purnama et al. (2020) reported that CSR disclosures and governance mechanisms positively influence company value, a finding supported by Hermawan et al. (2023), who demonstrated that CSR positively affects the value of companies in Indonesia. However, other studies report different results. Nurfina (2017) found that CSR disclosures do not significantly impact company value, which aligns with Pratiwi et al. (2020), who observed that CSR activities had no significant effect on Return on Assets (ROA) and Return on Equity (ROE).

Based on the background and previous studies, a gap has been identified, and the results of prior research remain inconsistent. This study aims to reassess whether Corporate Social Responsibility (CSR) has an impact on company value. The key difference in this study lies in the sample and the research period used. This research focuses on transportation industry companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023, specifically in Garuda Indonesia Tbk, Blue Bird Tbk, Air Asia Tbk, Temas Tbk, Adi Sarana Armada Tbk, and Samudera Indonesia Tbk. The rationale for choosing these transportation companies is that CSR disclosures in this sector have a significant impact on the environment, such as in the use of raw materials, fossil fuels, and pollutants. Therefore, CSR implementation by these companies can help mitigate the negative environmental impacts and promote more eco-friendly practices

Furthermore, the study will examine how CSR disclosures in these transportation companies can enhance their reputation and attract investors to invest in these companies. The implementation of CSR demonstrates the company's commitment to integrating social and environmental aspects into its operations, whether the company is financially healthy or experiencing losses. This study is expected to provide insights and contribute to transportation companies in increasing their company value through the implementation of CSR programs.

Methods

This research adopts a quantitative approach using an associative-causal method, with hypothesis testing conducted through regression analysis based on secondary data from the Indonesia Stock Exchange reports and the Annual & Sustainability Reports of six transportation companies: Garuda Indonesia Tbk, Blue Bird Tbk, Air Asia Tbk, Temas Tbk, Adi Sarana Armada Tbk, and Samudera Indonesia Tbk, for the 2019-2023 period. The data collected consists of annual and sustainability reports from these companies, as well as financial data published on the Indonesia Stock Exchange, which are essential for analyzing the impact of CSR and profitability on company value.

The data analysis was conducted using SPSS software, focusing on the variables of CSR funds, profitability (measured by Return on Equity or ROE), and firm value (measured by PBV) for six transportation companies listed on the Indonesia Stock Exchange. Regression analysis was employed to examine the relationship between the independent variable, CSR funds, and the dependent variable, firm value (PBV). Profitability was treated as a moderating variable, expected to influence the strength or direction of the relationship between CSR funds and company value. Hypothesis testing was performed to assess the significance of CSR funds' impact on firm value and the moderating effect of profitability. This approach provided valuable insights into how CSR initiatives and profitability interact to enhance the PBV of these Indonesian transportation companies.

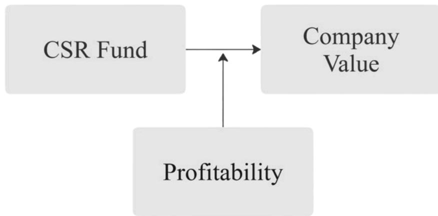

Figure 1. Research Design

Result and Discussion

Result

This study aims to analyze the impact of CSR on company value with profitability as a moderating variable. The data analysis includes classical assumption tests, multiple regression analysis, and hypothesis testing as follows:

1. Descriptive Statistics
   The CSR variable shows a wide range of values, with a high standard deviation. This indicates significant variability in CSR expenditures or scores across companies. The ROE variable has a similar pattern, with a positive average but a high standard deviation, suggesting both profitable and loss-making companies. The PB variable also exhibits a wide range and high standard deviation, indicating diverse market valuations. The ROECSR variable has a negative mean and a large standard deviation, suggesting that CSR activities might be associated with lower returns on equity, but the impact varies significantly across companies. Overall, the high variability in all variables highlights the diverse characteristics and financial performances of the companies in the sample.
2. Classic Assumption Test
   a. Normality Test
   The normality of residuals for the PBy variable was assessed using the Normal P-P Plot and the Kolmogorov-Smirnov test. The P-P Plot revealed deviations from the 45-degree reference line, especially at the tails, suggesting potential non-normality. The Kolmogorov-Smirnov test confirmed this, the statistic result is 0.366 with the significant value (Asymp. Sig. 2-tailed) of 0.000 which is below the typical alpha level of 0.05. This test result shows that the residuals for the variable PBy do not follow a normal distribution, since the p-value is less than 0.05, we reject the null hypothesis that the residuals are normally distributed. This indicates that the residuals do not follow a normal distribution. The non-normality of residuals can affect the validity of parametric tests and models. Therefore, considering transformations or non-parametric methods might be necessary to address this issue.
   b. Multicollinearity Test
   The VIF values for CSR and ROE are both close to 1, indicating low multicollinearity. Similarly, the tolerance values for both variables are close to 1, further confirming the absence of multicollinearity. This suggests that CSR and ROE do not overlap significantly in their explanatory power and can contribute unique information to the model.
   c. Heteroskedasticity Test
   The scatterplot suggests potential issues with linearity, heteroscedasticity, and outliers. The points don't form a clear linear pattern, the residuals spread unevenly, and there are a few extreme points. Heteroscedasticity can affect the reliability of significance tests, so it's important to address this issue. Possible solutions include transforming variables, using robust standard errors, or considering alternative regression models like weighted least squares.

d. Autocorrelation Test

The regression model has a weak positive relationship between the independent and dependent variables (R = 0.226). However, the model explains only 5.1% of the variance in the dependent variable (R^2 = 0.051). The adjusted R^2 is negative (-0.019), indicating that the model fits worse than a null model. The standard error of 110.35 suggests potential inaccuracy in predictions. The Durbin-Watson statistic of 0.996 hints at possible positive autocorrelation in the residuals. Additionally, the Durbin-Watson statistic close to 1 suggests potential autocorrelation in the residuals, which could impact the reliability of the regression results.

3. Hypothesis Test Result

a. Determination Coefficient Test

Table 2.. Determination Coefficient Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.226[a]	.051	-.019	110.35158	.996

The model summary indicates that the coefficient of determination (R^2) is 0.051, which suggests that only 5.1% of the variability in the dependent variable can be explained by the independent variables, namely ROE (Return on Equity) and CSR (Corporate Social Responsibility). This relatively low R^2 value implies that the model has limited explanatory power and that there may be other significant factors not included in the regression that influence PBV. The adjusted R^2 is negative (-0.019), which typically indicates that the model might be overfitted or that the independent variables do not contribute effectively to predicting the dependent variable. Additionally, the Durbin-Watson statistic of 0.996 suggests there might be slight positive autocorrelation in the residuals, although this value is close to 1, which is generally acceptable. Overall, the model does not appear to provide a strong fit for the data.

b. Individual Parameter Significance Test

Table 3. Individual Parameter Significance Test

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	39.789	23.377		1.702	.100
CSRx	-4.725E-10	.000	-.118	-.617	.542
ROEz	1.219	1.352	.172	.902	.375

The results of the individual parameter significance test indicate that neither CSR nor ROE significantly predict PBV, as evidenced by their p-values. For CSR, the unstandardized coefficient is -4.725E-10, with a t-value of -0.617 and a p-value of 0.542. This suggests that CSR has a minimal and statistically insignificant impact on PBV. Similarly, the coefficient for ROE is 1.219, with a t-value of 0.902 and a p-value of 0.375, indicating that ROE also does not significantly influence PBV. In both cases, the p-values are greater than 0.05, leading us to fail to reject the null hypothesis for both variables. This implies that, within the context of this model, there is no strong evidence that CSR and ROE are important predictors of PBV. The low significance of these predictors may suggest that other variables not included in this analysis could have a more substantial impact on profitability as measured by PBV.

c. Moderating Regression Analysis

Table 4. Correlations Test

		PBVy	CSRx	ROEz
PBVy	Pearson Correlation	1	-.150	.194
	Sig. (2-tailed)		.429	.304
	N	30	30	30
CSRx	Pearson Correlation	-.150	1	-.186
	Sig. (2-tailed)	.429		.324
	N	30	30	30

ROEz	Pearson Correlation	.194	-.186	1
	Sig. (2-tailed)	.304	.324	
	N	30	30	30

The correlation test results reveal weak relationships between PBV (Price to Book Value), CSR (Corporate Social Responsibility), and ROE (Return on Equity), none of which are statistically significant. The correlation between PBV and CSR is -0.150, suggesting a weak negative relationship. However, with a p-value of 0.429 (greater than 0.05), this correlation is not statistically significant, indicating that CSR does not have a meaningful linear association with PBV. Similarly, the correlation between PBV and ROE is 0.194, indicating a weak positive relationship, but the p-value of 0.304 also exceeds the 0.05 threshold, suggesting that this relationship is not statistically significant. The correlations between CSR and ROE show a coefficient of -0.186 with a p-value of 0.324, which again is not significant. These results imply that there are no strong linear associations among PBV, CSR, and ROE in this sample, and none of the variables appear to have a substantial influence on each other in a linear context.

Discussion

Based on the results of this study, the findings can be connected to previous research on the relationship between CSR, profitability, and company value, as well as the role of profitability as a moderating variable.

1. The Effect of CSR on Price to Book Value

   The weak correlation and insignificant impact of CSR on PBV observed in this study align with previous studies that also reported inconsistent or negligible effects of CSR on market value. For instance, studies by Yuvianita et al. (2020) found that corporate social responsibility disclosure hasn't significant influence on firm value. The negative coefficient for CSR in this study aligns with these findings, suggesting that CSR may offer reputational or long-term strategic advantages but does not consistently enhance immediate market value.

2. ROE and Company Value

   The study's finding that ROE also does not significantly predict PBV echoes the conclusions of Mahayati et al. (2021), who highlighted that profitability ratios like ROE might not always correlate strongly with market valuations, especially in the short term. In this study, despite ROE showing some positive returns on average, its weak relationship with PBV may reflect the complex nature of market perceptions, where other factors, such as growth potential, market trends, and investor sentiment, might have a stronger influence on company valuation.

3. Moderating Role of Profitability

   The failure to find a significant moderating effect of ROE on the CSR-PBV relationship also mirrors findings from Zalukhu et al. (2020), who suggested that the impact of CSR on financial performance might depend on the profitability context. They noted that CSR could enhance profitability when a company is already performing well but could have negligible or even negative effects in the absence of profitability. This study, however, did not find support for a significant moderating role of ROE, suggesting that other variables, not captured in this model, could be influencing the relationship between CSR and PBV.

Conclusion

This study concludes that Corporate Social Responsibility (CSR) expenditures do not significantly impact the company value of Indonesian transportation firms, nor does profitability serve as a moderating variable in this relationship. The regression analysis revealed a weak explanatory power, with an R^2 of only 5.1%, indicating that the independent variables (CSR and Return on Equity) are not effective predictors of the dependent variable (Price to Book Value).

These findings align with previous research that has produced inconsistent results regarding the impact of CSR on firm value. For instance, while some studies suggest a positive correlation between CSR initiatives and enhanced company reputation, which could attract investors, others indicate that the direct financial benefits of CSR may not be as pronounced, particularly in sectors like transportation where environmental impacts are significant.

The limited role of profitability in enhancing the effect of CSR further emphasizes the need for a broader understanding of the factors influencing company value in this sector. Future research is recommended to explore different financial ratios, alternative moderating variables, and varied research periods to gain deeper insights into the dynamics between CSR and firm value. This study contributes to the ongoing discourse on CSR's role in modern business, highlighting the complexity of its relationship with financial performance.

References

Brigham, E. ., & Houston, J. . (2016). *Dasar-Dasar Manajemen Keuangan*. Penerbit Salemba Empat.

Dupire, M., & M'Zali, B. (2023). CSR Strategies in Response to Competitive Pressures. *Journal of Business Ethics*, *148*, 603–623. https://doi.org/https://doi.org/10.1007/s10551-015-2981

Hermawan, S., Sari, Y. A., Biduri, S., Rahayu, D., & Rahayu, R. A. (2023). Corporate Social Responsibility, Firm Value, and Profitability: Evidence from Pharmaceutical Companies in Indonesia and Malaysia. *International Journal of Professional Business Review*, *8*(2). https://doi.org/https://doi.org/10.26668/businessreview/2023.v8i2.625

Irawan, D., & Kusuma, N. (2019). PENGARUH STRUKTUR MODAL DAN UKURAN PERUSAHAAN TERHADAP NILAI PERUSAHAAN. *Jurnal Aktual STIE Trisna Negara*, *17*(1), 66–81.

Mahayati, F., Fatonah, S., & Meilisa, R. (2021). PENGARUH RETURN ON EQUITY (ROE) DAN DEBT TO EQUITY RATIO (DER) TERHADAP NILAI PERUSAHAAN (PBV) PADA PERUSAHAAN MANUFAKTUR SUB SEKTOR LOGAM DAN SEJENISNYA YANG TERDAFTAR DI BEI. *Jurnal Valuasi : Jurnal Ilmiah Ilmu Manajemen dan Kewirausahaan*, *1*(1).

Manurung, A. A. (2016). Analisis Yuridis Penerapan Pp Nomor 47 Tahun 2012 Tentang Tanggung Jawab Sosial Dan Lingkungan Perseroan Terbatas (Studi Pada PTPN IV Unit Pasir Mandoge). *Premise Law Journal*, *4*.

Nandemar, D., & Amiruddin. (2020). CORPORATE SOCIAL RESPONSIBILTY(CSR) BERKEADILAN SOSIAL. *Accounting Profession Journal (ApaJi)*, *2*(2), 56–71. https://www.ojsapaji.org/index.php/apaji/article/view/11/11

Pemerintah Indonesia. (2007). *Undang-Undang Republik Indonesia Nomor 40 Tahun 2007 tentang Perseroan Terbatas*.

Pratama, A. P., & Serly, V. (2024). Pengaruh Penerapan Corporate Social Responsibility (CSR) terhadap Nilai Perusahaan. *Jurnal Eksplorasi Akuntansi (JEA)*, *6*(3). http://jea.ppj.unp.ac.id/index.php/jea/article/view/1699

Pratiwi, A., Nurulrahmatia, N., & Muniarty, P. (2020). Pengaruh Corporate Social Responsibility (CSR) Terhadap Profitabilitas Pada Perusahaan Perbankan Yang Terdaftar di BEI. *Owner : Riset dan Jurnal Akuntansi*, *4*(1). https://doi.org/https://doi.org/10.33395/owner.v4i1.201

Pristianingrum, N. (2017). Pengaruh Ukuran, Profitabilitas, dan Pengungkapan CSR Terhadap Nilai Perusahaan. *Prosiding Seminar Nasional dan Call For Paper Ekonomi Dan Bisnis (SNAPER-EBIS 2017)*.

Purnama, D., Apriyanti, E., & Nurhayati, E. (2020). PENGUNGKAPAN TANGGUNG JAWAB SOSIAL DAN MEKANISME TATA KELOLA TERHADAP NILAI PERUSAHAAN. *FINANCIAL : Jurnal Akuntansi*, *6*(2). https://financial.ac.id/index.php/financial/article/view/178

Sholihah, I. M., & Nuraina, E. (2013). PENGARUH CORPORATE SOCIAL RESPONSIBILITYINDEKS TERHADAP KINERJA PERUSAHAAN(STUDY PADA PERUSAHAAN INFRASTRUKTUR, UTILITAS, DAN TRANSPORTASI YANG LISTING DI BURSA EFEK INDONESIA). *ASSETS: Jurnal Akuntansi dan Pendidikan*, *2*(2), 71–85. https://e-journal.unipma.ac.id/index.php/assets/article/view/1203/1027

Suhartini, D., Tjahjadi, B., & Fayanni, Y. (2024). Impact of sustainability reporting and governance on firm value: insights from the Indonesian manufacturing sector. *Cogent Business & Management*, *11*(1). https://doi.org/https://doi.org/10.1080/23311975.2024.2381087

Wibisono, Y. (2007). *Membedah Konsep & Aplikasi CSR*. Fascho Publishing.

Yuvianita, M., Ahmar, N., & Mandagie, Y. (2020). Implikasi Corporate Social Responsibility(CSR) Terhadap Kinerja Keuangan Perusahaan Yang Memperoleh Sustainability Reporting Award (SRA). *Jurnal Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS)*, *2*(1), 145–151. https://doi.org/https://doi.org/10.35814/jiap.v2i2.3500

Zalukhu, Y. O., Manalu, H. A., & Munawarah. (2020). Implikasi Corporate Social Responsibility (CSR) Terhadap Kinerja Keuangan Perusahaan Yang Memperoleh Sustainability Reporting Award (SRA). *Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS)*, *2*(1), 145–151.

http://ejurnal.seminar-id.com/index.php/ekuitas/article/view/379