

The Effect of Cash Flow Adequacy Ratio (CFAR) and Debt Service Coverage Ratio (DSCR) on Earnings Per Share (EPS) at PT Gajah Tunggal Tbk for the 2015-2024 Period

Nita Asari¹, Arif Surahman²

¹²Pamulang University

Corresponding Author: nitaasari17@gmail.com

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Abstract: PT Gajah Tunggal Tbk has experienced significant fluctuations in financial performance, particularly in cash flow adequacy, debt service capacity, and earnings per share (EPS). This study examines the effect of the Cash Flow Adequacy Ratio (CFAR) and Debt Service Coverage Ratio (DSCR) on EPS during the 2015–2024 period. Using a quantitative descriptive approach, secondary data were obtained from the company's published financial statements. Saturated sampling was applied, encompassing all available annual reports within the study period. Data were analyzed using multiple linear regression in SPSS, supported by classical assumption tests, partial (t-test), and simultaneous (F-test) hypothesis testing. Results indicate that CFAR does not significantly affect EPS ($p = 0.921$), whereas DSCR has a significant positive effect ($p = 0.036$). Simultaneously, CFAR and DSCR significantly influence EPS ($F = 27.472$, $p = 0.000$), with a coefficient of determination (R^2) of 88.7%. These findings suggest that debt service capacity plays a crucial role in determining EPS, while cash flow adequacy does not exhibit a significant partial effect. The study provides insights for management in optimizing cash flow and debt management, and for investors in assessing the company's fundamental performance.

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Introduction

The manufacturing industry is a strategic sector contributing to Indonesia's economic growth. Increasingly fierce competition demands that companies improve efficiency,

innovation, and maintain financial performance to maintain investor confidence (Ramadhan & Lubis, 2026); (Apriantini & Surahman, 2025). In the context of the capital market, financial performance is one of the fundamental considerations for investors in making investment decisions (Kornelis et al., 2025); (Aziz & Widati, 2023). According to (Eduardus, 2017), the capital market is a platform for trading various financial instruments, while Earnings Per Share (EPS) is a key indicator for assessing a company's ability to generate profits per share (Saleh, 2023); (Kristafi & Mahirun, 2024); (Puspitasari & Sunarto, 2024).

PT Gajah Tunggal Tbk is a manufacturing company operating in the tire industry and faces various challenges, such as industry competition, exchange rate fluctuations, raw material price fluctuations, and foreign currency obligations. These conditions make the company's ability to generate cash flow and meet debt obligations a crucial aspect in maintaining business continuity (Satoto et al., 2023); (Sitohang & Wulandari, 2020). According to (Kariyoto, 2017), cash flow describes changes in cash originating from operating, investing, and financing activities (Gunawan & Imronudin, 2025). One indicator that can be used is the Cash Flow Adequacy Ratio (CFAR), while the ability to pay debt obligations can be measured through the Debt Service Coverage Ratio (DSCR) (Akila et al., 2025).

The phenomenon of PT Gajah Tunggal Tbk for the period 2015–2024 shows that the CFAR and DSCR experience fluctuations. The CFAR is low in several periods and reaches its lowest point in 2021 at 0.07, then shows a recovery to reach 1.58 in 2024. Meanwhile, the DSCR remains below one for most periods, indicating that the company's operational capacity is not fully capable of covering its debt obligations. This condition improves in 2024 when the DSCR reaches 1.40. This phenomenon indicates a change in the company's ability to manage cash flow and financial obligations during the study period.

These changes in financial condition are also reflected in EPS, which experiences significant fluctuations. PT Gajah Tunggal Tbk's EPS was negative in several years, particularly in 2015, 2018, and 2022, but increased significantly to Rp339.12 in 2023 and Rp341.10 in 2024. Theoretically, an increase in CFAR and DSCR should strengthen the company's financial condition, reduce funding risk, and support an increase in earnings per share. However, EPS is also influenced by other factors such as exchange rate fluctuations, financial burdens, accounting policies, and debt restructuring. Research by Dewi et al. (2025) shows that PT Gajah Tunggal Tbk's cash flow conditions for the 2018–2022 period fluctuated and its cash adequacy level was unstable.

Based on this phenomenon, a research gap exists because previous studies have focused more on analyzing a company's cash flow and have not specifically examined the effect of CFAR and DSCR on EPS for the 2015–2024 period. This research is crucial to determine whether the company's ability to generate cash and meet debt obligations can increase earnings per share. The research findings are expected to benefit management in managing cash flow and debt and provide information for investors in assessing the fundamental performance of PT Gajah Tunggal Tbk.

Research Methods

This study uses a quantitative descriptive research type that aims to describe the company's financial condition and analyze the effect of Cash Flow Adequacy Ratio and Debt Service Coverage Ratio on Earnings Per Share. The study was conducted at PT Gajah Tunggal Tbk listed on the Indonesia Stock Exchange, with research data obtained through financial reports published by the Indonesia Stock Exchange. The research population was in the form of PT Gajah Tunggal Tbk's financial reports during the research period, while the sample was determined using a saturated sampling technique, namely all financial report data that became the population were used as research samples. Data collection was carried out using the documentation method through tracing and collecting company financial reports and data related to research variables available from official sources of the Indonesia Stock Exchange.

Data analysis was conducted quantitatively using SPSS software. The analysis stages included classical assumption tests consisting of normality, multicollinearity, autocorrelation, and heteroscedasticity tests to ensure the feasibility of the regression model. Furthermore, multiple linear regression analysis was conducted to determine the effect of Cash Flow Adequacy Ratio and Debt Service Coverage Ratio on Earnings Per Share, as well as correlation analysis and coefficient of determination to determine the level of relationship and the magnitude of the contribution of independent variables to the dependent variable. Hypothesis testing was conducted through partial tests and simultaneous tests with a predetermined level of significance, so that the influence of each variable and the influence of both variables together on Earnings Per Share of PT Gajah Tunggal Tbk can be determined.

Results and Discussion

Classical Assumption Test Results

1. Normality Test

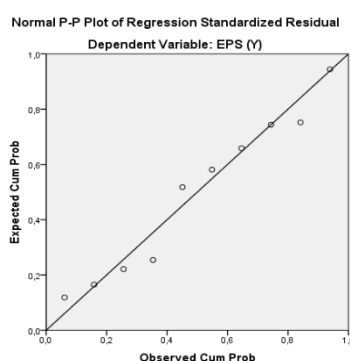


Figure 1. Normality Test Results

Based on the image above, it shows that the data is spread around the diagonal line and follows the direction of the diagonal line, so the data is normally distributed so it can be said that the regression model has met the assumption of normality.

2. Multicollinearity Test

Table 2. Multicollinearity Test

Collinearity Statistics

	Tolerance	VIF
CFAR (X1)	,131	7,631
DSCR (X2)	,131	7,631

Based on the table above, the tolerance value for variables (X1) and (X2) is 0.131, greater than 0.10. Meanwhile, the VIF value for variables (X1) and (X2) is $7.631 < 10.00$. Therefore, referring to the basis for decision-making in the multicollinearity test, it can be concluded that there are no symptoms of multicollinearity in the regression.

3. Heteroscedasticity Test

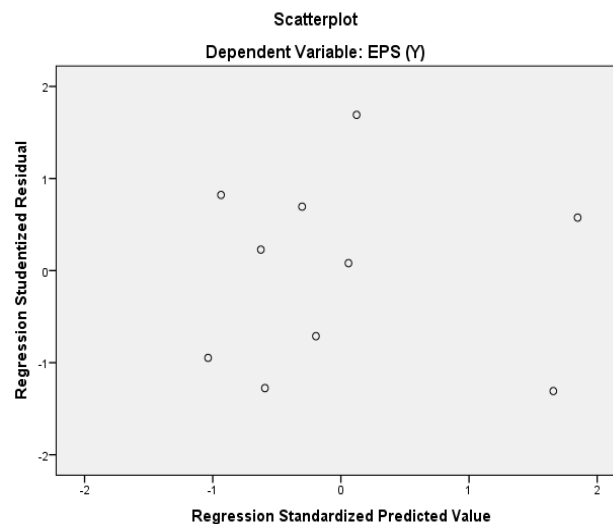


Figure 2. Results of Heteroscedasticity Test

The way to predict the presence or absence of heteroscedasticity in a model can be seen from the pattern of the model's scatterplot image. Analysis of the scatterplot image that shows a simple linear regression model does not have heteroscedasticity if;

- Data points are spread above and below or around the number 0.
- Data points do not cluster only at the top or bottom.
- The distribution of data points should not form a wavy pattern that widens then narrows and widens again.
- The distribution of data points should not be patterned.

Based on these characteristics, it is shown that this model avoids heteroscedasticity symptoms.

4. Autocorrelation Test

Table 3. Autocorrelation Test

Model Summary					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,942a	,887	,855	5167,71309	1,542
a. Predictors: (Constant), DSCR (X2), CFAR (X1)					
b. Dependent Variable: EPS (Y)					

Based on the table above, it is known that the Dubtin-Watson value (d) is 1.542. Next, this value will be compared with the Durbin Watson table value at 5% significance with the formula $(k; N)$. The number of independent variables is 3 or $"k" = 3$. While the number of

samples or "N" = 10, then (k; N) = (3; 10). We then look at this number in the distribution of the Durbin Watson table value, then we find a dL value of 0.5253 and a dU of 2.0163. The Durbin-Watson value (d) of 1.542 is greater than the dL value of 0.5253, so as the basis for decision making in the Durbin Watson test above, it can be concluded that there are no problems or symptoms of autocorrelation. Thus, multiple linear regression analysis for testing the research hypothesis can be carried out or continued.

Simple Linear Regression Analysis

Table 4. Results Simple Linear Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	,883a	,779	,751	6761,70647
a. Predictors: (Constant), CFAR (X1)				

Based on the table above, the R value is 0.883. This means that the influence of Cash flow Adequacy Ratio on EPS at PT Gajah Tunggal, Tbk is very strong. Meanwhile, the R Square (R²) value or Coefficient of Determination (KD) = 0.779. This means that 0.779 or 60.68% of EPS at PT Gajah Tunggal, Tbk is influenced by Cash flow Adequacy Ratio, while the remaining 39.32% is influenced by other variables not examined in this study. Meanwhile, the influence of Debt Service Coverage Ratio on Earnings Per Share of PT Gajah Tunggal, Tbk will use multiple linear regression tests with the help of SPSS version 29.00 for windows, as follows:

Table 5. Results Simple Linear Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	,942a	,887	,873	4837,55565
a. Predictors: (Constant), DSCR (X2)				

Based on the table above, the R value is 0.942. This means that the Debt Service Coverage Ratio has a very strong influence on EPS at PT Gajah Tunggal, Tbk. Meanwhile, the R Square (R²) or Coefficient of Determination (KD) value is 0.942. This means that 0.942 or 88.73% of EPS at PT Gajah Tunggal, Tbk is influenced by the Debt Service Coverage Ratio, while the remaining 11.270% is influenced by other variables not examined in this study.

Multiple Regression Analysis

Table 6. Results of Multiple Linear Regression Analysis

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	20875,420	6018,847		3,468	,010
1 CFAR (X1)	17,885	175,055	,036	,102	,921
DSCR (X2)	176,975	68,390	,908	2,588	,036
a. Dependent Variable: EPS (Y)					

From the results of the SPSS calculations above, a multiple linear regression equation

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can be constructed as follows: $Y = 20875.420 + 17.885X_1 + 176.975X_2$. Based on the equation line above, it can be seen that:

1. If the value of the independent variables, namely CFAR (X_1) and DSCR (X_2), is 0 (zero) or constant, then the amount of Earnings Per Share (EPS/Y) is projected to be at 20,875,420.
2. For every 1 unit increase in CFAR (X_1), assuming the DSCR (X_2) variable remains constant, Earnings Per Share (EPS / \$Y\$) will increase by 17.885. A positive sign indicates a positive relationship between Cash Flow Adequacy Ratio and EPS. The better the company's cash flow capability in meeting its obligations (CFAR), the higher the earnings per share generated.
3. For every 1 unit increase in DSCR (X_2), assuming the CFAR variable (X_1) remains constant, Earnings Per Share (EPS / Y) will increase by 176.975. A positive sign indicates a unidirectional (positive) relationship between the company's ability to pay off short-term to long-term debt obligations (DSCR) and EPS. The safer the company's debt service coverage ratio, the greater the positive impact on increasing earnings per share.

Coefficient of Determination (R^2)

Table 7. Results of the Determination Coefficient Test

Model Summary					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	,942a	,887	,855	5167,71309	1,542
a. Predictors: (Constant), DSCR (X2), CFAR (X1)					
b. Dependent Variable: EPS (Y)					

Based on the table above, the R value is 0.942. This means that the influence of Cash flow Adequacy Ratio and Debt Service Coverage Ratio on Earnings Per Share of PT Gajah Tunggal is very strong. Meanwhile, the R Square (R^2) value or Coefficient of Determination (KD) = $0.9422 \times 100 = 88.7\%$ EPS at PT Gajah Tunggal, Tbk is influenced by Cash flow Adequacy Ratio and Debt Service Coverage Ratio, while the remaining 11.3% is influenced by other variables not examined in this study.

Hypothesis Testing

1. Partial Hypothesis Testing (t-Test)

Table 8. t-Test Results

Coefficientsa					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant) 20875,420	6018,847		3,468	,010
	CFAR (X1) 17,885	175,055	,036	,102	,921
	DSCR (X2) 176,975	68,390	,908	2,588	,036
a. Dependent Variable: EPS (Y)					

From the SPSS output results above, the following conclusions can be drawn:

- a. Effect of Cash Flow Adequacy Ratio (X_1) on EPS (Y)

From the results of the t-test calculation above, it can be seen that $t \text{ count} < t \text{ table}$ ($0.102 < 2.228$), has no significant effect $0.921 > 0.05$, so H_0 is accepted and H_a is rejected, meaning that the Cash Flow Adequacy Ratio partially has no significant effect on EPS.

b. The effect of Debt Service Coverage Ratio (X2) on EPS (Y)

From the results of the t-test calculation above, it can be seen that $t \text{ count} > t \text{ table}$ ($2.588 > 2.228$), has a significant effect of $0.036 < 0.05$, so H_0 is rejected and H_a is accepted, meaning that the Debt Service Coverage Ratio partially has a significant effect on EPS.

2. Simultaneous Hypothesis Testing (F Test)

Table 9. F Test Results

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1467291312,280	2	733645656,140	27,472	,000b
1 Residual	186936809,720	7	26705258,531		
Total	1654228122,000	9			

a. Dependent Variable: EPS (Y)

b. Predictors: (Constant), DSCR (X2), CFAR (X1)

From the results of the F test calculation above, it can be seen that $F_{\text{count}} > F_{\text{table}}$ ($27.472 > 3.71$) with a significant value of $0.000 < 0.05$ or 5%. Therefore, it can be concluded that H_0 is rejected and H_a is accepted, meaning that the Cash Flow Adequacy Ratio and Debt Service Coverage Ratio variables together (simultaneously) have a significant effect on EPS at PT Gajah Tunggal, Tbk.

Discussion

Effect of Cash Flow Adequacy Ratio (X1) on EPS (Y)

From the analysis results, it is known that the calculation of Cash flow Adequacy Ratio to EPS of PT Gajah Tunggal, Tbk. is known to have a value of $R = 0.883$. This means that the influence of Cash flow Adequacy Ratio on EPS at PT Gajah Tunggal, Tbk is very strong. Meanwhile, the value of R Square (R^2) or Coefficient of Determination (KD) = 0.779. This means that 0.779 or 60.68% of EPS at PT Gajah Tunggal, Tbk is influenced by Cash flow Adequacy Ratio, while the remaining 39.32% is influenced by other variables not examined in this study.

This indicates that the Cash Flow Adequacy Ratio contributes positively to the increase in EPS of PT Gajah Tunggal, Tbk. Cash Flow Adequacy Ratio. The results of this study are in line with research conducted by (Al-Momani et al., 2023), which found that liquidity, solvency, and cash flow from operations have a positive impact on the earnings persistence of manufacturing companies listed on the ASE. Similarly, previous research conducted by (Kumar, 2024) showed that financial leverage, interest coverage ratio, and debt-to-equity ratio significantly affect EPS. The interest coverage ratio has a positive effect, while financial leverage and debt-to-equity ratio have a negative effect.

The effect of Debt Service Coverage Ratio (X2) on EPS (Y)

The results of the study revealed the influence of the Debt Service Coverage Ratio on the EPS of PT Gajah Tunggal, Tbk. The R value is 0.942. This means that the influence of the Debt Service Coverage Ratio on EPS at PT Gajah Tunggal, Tbk is very strong. Meanwhile,

the R Square (R²) value or the Coefficient of Determination (KD) = 0.942. This means that 0.942 or 88.73% of EPS at PT Gajah Tunggal, Tbk is influenced by the Debt Service Coverage Ratio, while the remaining 11.27% is influenced by other variables not examined in this study.

Thus, it can be said that the Debt Service Coverage Ratio contributes positively to the increase in EPS of PT Gajah Tunggal, Tbk. The results of this study are in line with research conducted by (Al-Momani et al., 2023), which found that liquidity, solvency, and cash flow from operations have a positive impact on the earnings persistence of manufacturing companies listed on the ASE. Similarly, previous research conducted by (Kumar, 2024) showed that financial leverage, interest coverage ratio, and debt-to-equity ratio significantly affect EPS. The interest coverage ratio has a positive effect, while financial leverage and debt-to-equity ratio have a negative effect.

The Influence of Cash Flow Adequacy Ratio and Debt Service Coverage Ratio on EPS

The results of the analysis show that simultaneously, Cash flow Adequacy Ratio and Debt Service Coverage Ratio have a significant effect on EPS of PT Gajah Tunggal, Tbk. From the results of the F test calculation, it is known that $F_{count} > F_{table}$ ($27.472 > 3.71$) with a significant value of $0.000 < 0.05$ or 5%. So it can be concluded that H_0 is rejected and H_a is accepted, meaning that the Cash flow Adequacy Ratio and Debt Service Coverage Ratio variables simultaneously have an effect on EPS at PT Gajah Tunggal, Tbk.

The results of this study align with research conducted by (Al-Momani et al., 2023), which found that liquidity, solvency, and cash flow from operations positively impact earnings persistence in manufacturing companies listed on the ASE. Similarly, previous research by (Kumar, 2024) found that financial leverage, interest coverage ratio, and debt-to-equity ratio significantly impact EPS. The interest coverage ratio had a positive effect, while financial leverage and debt-to-equity ratio had a negative effect.

Conclusion and Recommendation

Based on the research results, it can be concluded that Digital Customer Experience, Online Interaction, and Product Benefit have a positive and significant effect on Impulsive Buying and Emotional Value in Jiniso product consumers on Shopee Mall. In addition, Emotional Value has a positive and significant effect on Impulsive Buying, which shows that positive experiences, good interactions, and product benefits can create feelings of pleasure, comfort, satisfaction, and interest, thus increasing the tendency for consumers to make spontaneous purchases. Emotional Value is also proven to partially mediate the influence of Digital Customer Experience, Online Interaction, and Product Benefit on Impulsive Buying. Thus, the better the digital experience, online interactions, and product benefits perceived by consumers, the higher the emotional value formed and the greater the tendency for impulsive buying.

Based on the research results, marketing practitioners and the Jiniso Official Store on Shopee Mall are advised to improve the quality of the digital experience by presenting more

complete, clear, and attractive product information, strengthening service personalization, and maintaining product quality that suits consumer needs. The speed and quality of communication through chat features and interactive services also need to be improved to create better relationships with consumers and strengthen emotional value. In addition, Jiniso needs to maintain relevant and attractive product presentations so that the shopping experience remains enjoyable and can increase consumer engagement. For future researchers, it is recommended to expand the research area, increase the number of respondents, use different e-commerce objects or platforms, and add other relevant variables so that the research results are more comprehensive and can be generalized.

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