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Capital Structure and Investment Return: A Case Study of PT Semen Indonesia

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Abstract

This study aims to analyze the effect of Debt to Asset Ratio (DAR) and Long Term Debt to Equity Ratio (LTDTER) on Return on Investment (ROI) at PT Semen Indonesia (Persero) Tbk during the period 2016–2023. The method used is descriptive associative with a quantitative approach, using secondary data in the form of the company's quarterly financial reports obtained through purposive sampling techniques. The analytical tools used include Pearson Product Moment correlation analysis, coefficient of determination (R^2), t-test and F-test, and multiple linear regression. The results of the study show that DAR has a negative correlation with ROI of -0.607, while LTDTER also shows a negative correlation of -0.478, both of which are included in the weak relationship category. The coefficient of determination value of 50.4% indicates that half of the variation in ROI can be explained by the two independent variables, while the remaining 49.6% is influenced by other factors outside the study. The F test shows that DAR and LTDTER simultaneously have a significant effect on ROI. This finding confirms that a high debt-based capital structure has a negative impact on investment returns, making it important for financial management to consider the efficiency of long-term debt use and total debt in long-term financial strategies.

Keywords: Debt to Asset Ratio, Long Term Debt to Equity Ratio, Return on Investment, Capital Structure, Financial Performance

INTRODUCTION

The effectiveness of financial management in a company can be observed from how capital structure influences profitability, particularly through metrics such as Return on Investment (ROI). ROI serves as a critical indicator of how efficiently a company utilizes its capital both debt and equity to generate profit (Kasmir, 2022). For capital intensive firms such as those in the cement industry, financial decisions regarding the proportion of debt and equity are essential to sustain competitiveness and maximize shareholder value. However, determining the optimal debt level remains a fundamental challenge due to the trade off between the benefits of debt financed growth and the risk of financial distress (Zimon et al., 2022). In this context, two widely used indicators to assess corporate capital structure are the Debt to Asset Ratio (DAR) and the Long Term Debt to Equity Ratio (LTDTER), both of which signal how a company finances its operational and strategic investments. The core issue addressed in this study is whether an increase in these debt-based ratios positively or negatively affects ROI in the case of PT Semen Indonesia (Persero) Tbk.

To address this issue, the research explores a dataset from PT Semen Indonesia covering 2016 to 2023, a period characterized by shifts in capital structure due to expansion strategies and market realignments. Although existing financial theories often suggest that prudent use of debt can enhance profitability through tax shields and leverage effects (Modigliani & Miller, 1963), empirical outcomes vary significantly across sectors and economic cycles. The case of PT Semen Indonesia, a state owned enterprise that underwent corporate consolidation and market repositioning during the studied period, provides a suitable ground to assess this relationship. The company's financial statements revealed fluctuating DAR and LTDTER levels, raising questions about their correlation with investment returns. This research aims to deliver clarity on the extent to which debt driven capital structure impacts ROI in Indonesia's industrial sector.

Several recent studies offer contrasting conclusions on the effects of debt ratios on corporate performance. Pratiwi and Arief (2020) found that DAR has a significant negative effect on ROI in Indonesian manufacturing firms. Similarly, Raharjo and Sari (2021) observed that high debt levels increase financial risk, thereby reducing profitability. On the contrary, Jihan Salim (2021) suggested that LTDTER positively affects ROI when long term debts are strategically allocated for productive assets. Another study by Zulkarnain (2023) emphasized that while DAR tends to depress profit margins, it may still support growth if interest costs are controlled. Ashari and Djoko (2022) added that the impact of capital structure is often moderated by operational efficiency and macroeconomic stability. Despite these findings, a consistent understanding of the ROI implications from DAR and LTDTER remains elusive, particularly in SOEs operating under regulatory and public service mandates.

The inconsistency in existing literature highlights a significant research gap, especially in the context of publicly listed, state owned enterprises in emerging economies. Most prior research was conducted on either general

manufacturing firms or private entities, whereas PT Semen Indonesia operates within a hybrid structure balancing commercial performance with state obligations. Thus, it is essential to explore whether standard financial theories on leverage are applicable in such settings, or whether new frameworks are needed to interpret the relationship between capital structure and investment returns. Furthermore, the volatile ROI performance observed during the 2016–2023 period ranging from 0.33% to 11.97% suggests potential inconsistencies between financial policy and actual outcomes, warranting academic investigation.

In light of the above, this study aims to analyze the effect of Debt to Asset Ratio and Long Term Debt to Equity Ratio on Return on Investment at PT Semen Indonesia (Persero) Tbk. Theoretically, this research contributes to the financial literature by refining the understanding of capital structure implications in SOEs under dynamic market environments. Empirically, it provides practical insights for corporate financial managers and policymakers in determining optimal leverage strategies. The study ultimately aspires to support better financial decision making through evidence based evaluation of key performance indicators in industrial enterprises.

METHOD

This research followed a structured set of stages to ensure the study's validity and alignment with its objectives. The process began with identifying the research problem based on fluctuations in ROI and debt levels at PT Semen Indonesia (Persero) Tbk between 2016 and 2023. The next step was to define the research objectives and formulate hypotheses grounded in financial theory and previous empirical findings. Data collection was conducted through secondary sources, specifically the company's quarterly financial reports retrieved from the official website of the Indonesia Stock Exchange (IDX). The sampling technique used was purposive sampling, selecting quarterly reports that met completeness and consistency criteria. Following data collection, the next phase involved data processing and preparation using Microsoft Excel. The processed data was then imported into SmartPLS software for Structural Equation Modeling Partial Least Squares (SEM PLS) analysis. This analysis included several stages: model specification, outer model evaluation (validity and reliability testing), inner model evaluation (R-square, path coefficients), and hypothesis testing via bootstrapping.

The implementation of this research was conducted through a sequence of well defined stages to ensure that each methodological step aligned with the research objectives. The activities performed at each stage are summarized in the following table, which outlines the systematic progression from identifying the research problem to drawing conclusions and formulating recommendations based on the analysis results.

Table 1. Research Stages Overview

No	Research Stage	Description
1	Problem Identification	Examined the impact of DAR and LTDTER on ROI at PT Semen Indonesia Tbk (2016–2023)
2	Literature Review & Hypothesis	Established theoretical and empirical background to formulate testable hypotheses
3	Data Collection	Collected quarterly financial reports from the IDX
4	Sample Selection	Applied purposive sampling with criteria on data completeness and consistency
5	Ratio Calculation	Measured DAR, LTDTER, and ROI using standard accounting formulas
6	Data Analysis (SPSS)	Performed statistical tests including regression and hypothesis testing
7	Conclusion & Recommendation	Summarized findings and offered practical implications for corporate finance decision making

The research began with the identification of the core problem, which is the inconsistency in ROI performance observed at PT Semen Indonesia (Persero) Tbk, potentially linked to fluctuations in its capital structure as measured by the Debt to Asset Ratio and Long Term Debt to Equity Ratio. This step was crucial in establishing the research direction. Subsequently, the literature review was carried out to build a theoretical foundation and examine previous empirical findings relevant to the variables under study. This step informed the formulation of research hypotheses that aligned with existing financial theories.

Data were collected from the Indonesia Stock Exchange in the form of secondary data comprising the company's quarterly financial statements for the 2016–2023 period. The sample selection used purposive sampling, focusing only on financial reports that met the completeness and consistency criteria across the observed time span. Following this, financial ratios were calculated using standard accounting formulas. These included DAR, LTDTER, and ROI, which served as the main indicators in this study. The calculations were essential for transforming raw financial data into analytical variables. In the data analysis stage, SPSS was used to carry out various statistical procedures. This included descriptive statistics, classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation), Pearson correlation analysis, and multiple linear regression. These analyses allowed the researcher to test the hypotheses and measure the strength and direction of the relationships among the variables. Finally, conclusions were drawn based on the statistical output, and practical recommendations were formulated. These findings are intended to

assist financial decision makers at PT Semen Indonesia (Persero) Tbk in evaluating the effectiveness of their capital structure policies, especially regarding debt utilization and its impact on investment returns.

RESULTS AND DISCUSSION

The results of this study demonstrate a significant relationship between capital structure and corporate profitability, as represented by the Debt to Asset Ratio (DAR) and Long Term Debt to Equity Ratio (LTDTER) in relation to Return on Investment (ROI) at PT Semen Indonesia (Persero) Tbk over the 2016–2023 period. According to the Pearson correlation analysis, the coefficient between DAR and ROI was -0.607, indicating a moderate and negative relationship, while the correlation between LTDTER and ROI stood at -0.478, also negative but with weaker intensity. These figures suggest that increases in the proportion of debt, whether total or long term, are inversely associated with returns on investment. The coefficient of determination (R^2) was recorded at 50.4%, implying that both independent variables explain slightly more than half of the variation in ROI, while the remaining 49.6% is likely influenced by external factors such as operational efficiency, changes in input costs, or macroeconomic conditions. Further regression analysis reinforced these findings with both variables presenting negative coefficients, and the F test confirmed that DAR and LTDTER collectively have a statistically significant effect on ROI ($F > F\_table$, $p < 0.05$).

The tables and graphs presented in the study clearly illustrate fluctuations in these ratios over the eight year observation period. ROI peaked at 11.97% in the first quarter of 2016 and hit a low of 0.33% in the first quarter of 2019. During this time, the highest DAR reached 4.27% in 2019, while LTDTER peaked at 7.66% in the fourth quarter of the same year. The consistent negative correlation between rising debt levels and declining ROI strongly indicates that high leverage was not beneficial for PT Semen Indonesia, particularly when not offset by enhanced operational efficiency or revenue generating expansion. These findings quantitatively support the hypothesis that a debt heavy capital structure adversely affects investment returns in this industrial context.

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A. Research Instrument Test

1. Koefisien Determinasi Test (R^2)

The magnitude of the contribution of the influence of Debt to Asset Ratio (X1) and Long Term Debt to Equity Ratio (X2) Return on Investment (Y) can be analyzed using the coefficient of determination (R2) method. The value of the coefficient of determination (R2) reflects how much of the dependent variation of Y can be explained by the independent variable X. If the coefficient of determination is equal to zero, it means that the variation of Y cannot be explained by X at all. Meanwhile, if the coefficient of determination (R2) is equal to one, it means that the variable Y as a whole can be explained by X, in other words, all observation points are on the regression line. Thus, the good or bad of a regression equation is determined by (R2) which has a value between zero and one. The coefficient of determination can be calculated using the following formula:

$$D = R^2 \times 100\%$$

Information:

D	:	Determinasi
R2	:	Multiple Correlation Value
100%	:	Contribution Percentage

The following are the results of the determination coefficient test using the SPSS program output:

2. Coefficient of Determination Test

Table 2. Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,710[a]	,504	,470	,0190411	1,844

Based on the results of the determination coefficient test in table 2 above, to determine the extent of the influence of the Debt to Asset Ratio and Long Term Debt to Equity Ratio variables on Return on Investment, this can be determined through the determination coefficient test as follows:

$KD = (0{,}710)^2 \times 100\%$

$KD = 504{,}1 \times 100\%$

$KD = 504{,}1\%$

Based on the calculation above, it can be seen that the coefficient of determination is RSquare of 504.1% or 50.4, the conclusion is that the Debt to Asset Ratio (X1) and Long Term Debt to Equity Ratio (X2) are 50.4 while the remaining 49.6% (100% - 50.4%) is influenced by other variables such as operating costs, income, capital costs, operating asset turnover (TOA) and profit margin outside the research.

3. Multiple Linear Regression Test

The analysis method used in this study is a multiple linear regression analysis model, intended to test the extent and direction of independent variables affecting the dependent variable. The analysis used to test the equation is mathematically formulated as follows:

$$Y = \alpha + b1.\ X1 + b2.\ X2 + e$$

Information:

Y	:	*Return On Investment*
A	:	Konstanta
b1,b2	:	Nilai Koefisien Regresi
X1	:	*Debt To Asset Ratio*
X2	:	*Long Term Debt To Equity Ratio*
E	:	Standard eror

The following are the results of testing and analyzing multiple linear regression with the help of the statistics program IBM SPSS Statistics For Windows version 27, as follows:

Table 3. Multiple linear regression test

Coefficients[a]							
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
Model	B	Std. Error	Beta			Tolerance	VIF
(Constant)	,201	,038		5,270	,000		
DAR	-,533	,133	-1,861	-4,011	,001	,079	12,591
LTDER	,110	,039	1,308	2,818	,009	,079	12,591

Based on the output of table 3, namely the coefficient table, the constant (a) obtained is 0.201 while the regression coefficient value of Debt to Asset Ratio (b1) is -0.533 and Long Term Debt to Equity Ratio (b2) is 0.110 so that the following equation can be written:

$$Y = \alpha + b1.\ X1 + b2.\ X2 + e$$

$$Y = 0{,}201 + (-0{,}533)X1 + 0{,}110\ X2$$

Information:

a. The constant value (a) of the regression equation is 0.201, meaning that if the Debt to Asset Ratio and Long Term Debt to Equity Ratio are increased by 1 time, it will cause the Return on Investment value to increase by IDR 0.210 and vice versa.
b. The regression coefficient value of the Debt to Asset Ratio (X1) variable is -0.533, meaning that if the Debt to Asset Ratio is increased by 1 time, it will cause the Return on Investment value to increase by Rp. 0.533 and vice versa..
c. The regression coefficient value of the Long Term Debt To Equity Ratio (X2) variable is 0.100, if the Long Term Debt To Equity Ratio is in a constant state or remains unchanged, then the Return On Investment value is 0.110, if the Return On Investment increases by 1 time then the Return On Investment increases by 0.110.

B. Hypothesis Testing

1. T-test (partial testing)

According to Ghozali (2021:148) the t-test is used to show how far the influence of an explanatory/independent variable individually explains the variation of the dependent variable. This test is carried out by comparing the calculated t with the t-table. To find out the results of the t-test in this study, the IBM SPSS Statistics Program Version 27 was used with the following results:

Table 4. Result of t-test (Partial)

Coefficients[a] Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
(Constant)	,201	,038		5,270	,000		
DAR	-,533	,133	-1,861	-4,011	,001	,079	12,591
LTDER	,110	,039	1,308	2,818	,009	,079	12,591

t_{tabel} = t (α/2; n-k-1) = t (0,05/2;32-2-1) = t (0,025;29) = 2,045

From table 4 it can be concluded:

a. 1. The effect of Debt To Asset Ratio on Return On Investment variable debt to asset ratio (X1) on the variable Return on investment (Y) which can be seen from the sig value of 0.001 <0.05. In addition, the ttable value = t (α / 2; n-k-1) = t (0.05 / 2; 32-2-1) = t (0.025; 29) = 2.045 and at the tcount value of -4.011 then the comparative value of tcount and ttable (-4.011 <2.045). So it can be concluded that the hypothesis is not accepted.

b. The Effect of Long Term Debt To Equity Ratio on Return On Investment The Long Term Debt To Equity Ratio (X2) variable on Return On Investment (Y) variable can be seen from the sig value of 0.009 > 0.05. In addition to the ttable value = t (α / 2; n-k-1) = t (0.05 / 2; 32-2-1) = t (0.025; 29) = 2.045 and the tcount value of 2.818, the comparison value of tcount and ttable (2.818 > 2.045). So it can be concluded that the hypothesis is accepted.

2. F test (simultaneous testing)

According to Ghozali (2021:148) the purpose of the F test is to find out or test whether the regression model equation can be used to see the independent effect on the dependent variable. The F test (simultaneous) basically shows whether all independent (free) variables included in the model have a joint effect on the dependent (bound) variable. This test is carried out by comparing the calculated F value with the F table. To find out the results of the F test in this study, we used the IBM SPSS Statistics Program Version 27 with the following results:

Table 5. F test results (Simultaneous)

ANOVA[a] Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	,011	2	,005	14,738	,001[b]
Residual	,011	29	,000		
Total	,021	31			

Based on table 5 of the theory that has been explained, it is known that the Ftable value = F (k; n-k) = F (2; 32-2) = 2; 30 = 3.32 and the Fcount value is 14.738 with a sig value of 0.001. So it can be interpreted that the sig value of 0.001 <0.05 and the Fcount comparison value> Ftable (14.738> 3.32). So it can be concluded that the hypothesis is accepted. This means that there is a simultaneous Influence of Debt to Asset Ratio and Long Term Debt To Equity Ratio on Return On Investment at PT Semen Indonesia Tbk.

This study aims to test the effect of Debt To Asset Ratio and Long Term Debt To Equity Ratio on Return On Investment at PT Semen Indonesia (Persero) Tbk for the 2016-2023 period based on the results of the analysis, so the discussion of the results of this study is as follows:

Table 6. Overall hypothesis testing results

Hipotesis	Pernyataan	Hasil
H1	It is suspected that there is an influence of the Debt To Asset Ratio on Return On Investment at PT Semen Indonesia Tbk listed on the Indonesian Stock Exchange for the 2016-2023 period	Ditolak

H2	It is suspected that there is an influence of the Long Term Debt To Equity Ratio on Return On Investment at PT Semen Indonesia Tbk listed on the Indonesian Stock Exchange for the period 2016-2023	Diterima
H3	It is suspected that there is an influence of the Debt To Asset Ratio and Long Term Debt To Equity Ratio on the Return on Investment at PT Semen Indonesia Tbk listed on the Indonesian Stock Exchange for the 2016-2023 period	Diterima

IMPLEMENTATION

The implementation of the research method in this study has been conducted through the application of quantitative statistical testing using IBM SPSS Statistics for Windows version 27, aimed at analyzing the influence of capital structure variables—namely, Debt to Asset Ratio (DAR) and Long-Term Debt to Equity Ratio (LTDTER)—on Return on Investment (ROI). The application of this method began with the transformation of quarterly financial statements from PT Semen Indonesia (Persero) Tbk into measurable financial ratios. These ratios served as input for the statistical model, which was then used to conduct multiple linear regression testing, hypothesis testing (t-test and F-test), and coefficient of determination analysis. The practical outcome of this implementation lies in the ability of the model to quantitatively evaluate how different levels of debt influence investment returns. This statistical insight provides a replicable framework for other publicly listed companies to analyze their own financial policies and their impact on profitability.

From an operational standpoint, the regression model and hypothesis testing served as empirical tools to validate or reject the theoretical assumptions underlying corporate financial decisions. By applying the model to eight years of quarterly financial data, the study revealed that DAR has a significant and negative impact on ROI, whereas LTDTER has a positive but weaker effect. This implementation not only tested the theoretical model but also translated it into a practical diagnostic tool for financial decision-making. The outcomes suggest that similar analytical frameworks could be implemented by financial managers within SOEs and large industrial firms in Indonesia, especially those seeking to balance between leveraging for growth and minimizing financial risk. Hence, the implementation of this method is both academically robust and practically applicable in corporate financial management.

CONCLUSION

This study concludes that capital structure, particularly the proportions of debt within a company's financial configuration, significantly affects investment returns at PT Semen Indonesia (Persero) Tbk during the 2016–2023 period. Empirical testing shows that the Debt to Asset Ratio (DAR) has a statistically significant negative effect on Return on Investment (ROI), indicating that excessive debt usage may lead to a decline in profitability. Conversely, the Long-Term Debt to Equity Ratio (LTDTER) displays a weaker but positive correlation, suggesting that long-term debt, when managed prudently, can contribute to investment performance. The regression model developed through this research demonstrates that 50.4% of the variation in ROI is explained by these two capital structure variables, while the remaining 49.6% is influenced by other operational or external factors. These findings underscore the need for strategic debt management, especially in state-owned enterprises operating in capital-intensive sectors like cement manufacturing.

In a broader context, this research reaffirms the importance of aligning financial policy with operational realities and market dynamics. Although theoretical models often advocate for the benefits of leverage through tax shields and capital efficiency, their practical implications depend heavily on the firm’s internal capacity to generate returns from borrowed funds. For PT Semen Indonesia, the results emphasize that optimal debt usage must be supported by effective investment allocation and cost control. The study also highlights a gap in understanding how capital structure interacts with public obligations in hybrid corporate models. Future research is encouraged to incorporate additional variables, such as operational efficiency and macroeconomic factors, to further enhance predictive accuracy. Ultimately, this study contributes to the literature on financial management in emerging-market SOEs and provides actionable insights for improving corporate decision-making regarding capital structure.

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REFERENCES

Babbar, A., & Singh, N. P. (2024). The relationship between capital structure and financial performance of the cement industry in India. Naturalista Campano, 28(2), 59-72. https://doi.org/10.5281/10981374

Said, S. (2025). The impact of capital structure on firm performance. Open Access Library Journal. https://doi.org/10.4236/oalib.1112839

UNK Author. (2024). Corporate capital structure effects on corporate performance. Journal of Corporate Finance (approx. 78 firms).

Author(s). (2023). Impact of capital structure on profitability of cement industry in Bangladesh.

Nainggolan, B. M. H., Sukma, R. P., & Nurtina, A. R. (2022). Effect of debt ratio, long-term debt to equity, and firm size on profitability: Evidence from Indonesian hotel and tourism firms. Journal of Management and Leadership, 5(1), 27-41.

Anyakwu, M. A., Jim-Suleiman, S. L., & Okwoli, A. A. (2022). Equity and debt financing on the profitability of the cement industry in Nigeria. Journal of Economics, Finance and Management Studies, 5(3), 839-847.

Chen, Y., Migliaro, D., & Silva, J. T. (2021). Empirical study of capital structure and profitability of SMEs in Brazil. Business Economics & Management Review, 21, 1095-1108.

Emerald Publisher. (2021). Debt financing and firm performance: Empirical evidence. Asian Journal of Accounting Research

Sattar, Author. (2023). Impacts of cost of capital on firm value and profitability: Insights from the cement industry in Bangladesh. International Journal of Research in Innovative Social Science, 6(2).

Wiley Authors. (2024). Influence of growth, capital structure, profitability, and size on enterprise value: Evidence from FTSE 100. Journal of Corporate Accounting & Finance.

IOSR Authors. (2025). Matching capital structure ratios against corporate financial performance in Nigerian consumer firms. IOSR Journal of Business and Management, 27(5).