

The Impact of Liquidity and Solvency Ratios on Profitability: Evidence From The Indonesian Construction Sector (2020-2023)

Tb Daniel Arisandi *

¹ Management, Sekolah Tinggi Ilmu Ekonomi (STIE) Ekuitas, Bandung, Indonesia.

ABSTRACT

Introduction/Main Objectives: The construction and building industry plays a vital role in Indonesia's infrastructure development, encompassing roads, bridges, buildings, and other public facilities. Development in Indonesia, which includes the construction of roads, bridges, buildings and other public facilities. **Background Problems:** According to Indonesia's GDP data from 2020 to 2023, the construction sector experienced a sharp decline in revenue in 2020 as a result of the COVID-19 pandemic. Although recovery began in 2021, financial performance among construction firms has remained uneven. Ensuring sound financial health is therefore essential for attracting investment. **Novelty:** Previous empirical evidence indicates inconsistencies in the relationship between financial ratios and Return on Assets (ROA), highlighting the need for further investigation. **Research Methods:** This study employs descriptive and verification methods within a quantitative framework. Data were obtained through purposive sampling of construction and building subsector companies listed on the IDX from 2020 to 2023, and were analyzed using multiple linear regression. **Finding/Results:** The findings reveal that the Current Ratio (CR) has a positive and significant effect on Return on Assets (ROA), while the Debt-to-Equity Ratio (DER) has a negative and significant effect on ROA. Together, these variables explain 63.9% of the variation in ROA, with the remaining 36.1% influenced by other factors. **Conclusion:** In conclusion, the Current Ratio (CR) positively contributes to financial performance, as measured by ROA, whereas the Debt-to-Equity Ratio (DER) exerts a negative effect. These findings underscore the importance of maintaining liquidity and managing leverage in construction and building subsector companies listed on the IDX.

ARTICLE INFO

Keywords:
Current Ratio_1, Return
on Asset _2,
Construction_3, Building
Sub-Sector _4

*Submitted: 16 January
2025*

*Reviewed: 03 March
2025*

*Accepted: 07 March
2025*

*Published: 26
September 2025*

* Tb Daniel Arisandi at Management, Sekolah Tinggi Ilmu Ekonomi (STIE) Ekuitas, Bandung, Indonesia.
E-mail address: tbDaniel66@gmail.com (author#1)

1. Introduction

The construction sector plays a crucial role in Indonesia's infrastructure development, including roads, bridges, and public facilities. However, the COVID-19 pandemic in 2020 caused a sharp decline in this sector's performance, as reflected by a contraction in construction GDP of -3.26%. Although recovery began in 2021, financial performance among construction companies listed on the Indonesia Stock Exchange (IDX) remained volatile. Financial stability is essential to maintain investor confidence.

Table 1. Gross Domestic Product (GDP) Construction Sub Sector 2019-2021

Year	GDP Current Prices / Rp	Sectoral GDP Growth / percent
2018	1.562.297.000.000.000	6,09
2019	1.701.741.200.000.000	5,76
2020	1.652.659.600.000.000	-3,26
2021	1.771.726.700.000.000	2,81

Source: Gross Domestic Product (GDP) Databook's 2018-2021 (Adi Ahdiat, 2023)

In early 2022, the construction sector contracted by 1.24% due to reduced cement procurement. However, compared to the same period in the previous year, growth was supported by increased infrastructure activity and raw material imports. In 2023, most state-owned construction stocks performed poorly, with only PT Jasa Marga Tbk (JSMR) showing a 59.06% increase. Annual data also showed a decline in income across seven construction sectors. According to (Kusuma, 2016) The current ratio measures a company's ability to meet its short-term obligations as they fall due. In other words, it indicates the extent to which current assets are available to cover short-term liabilities. Meanwhile, research (Setowening1 & Djuminah, 2024) says that as a result, companies with high ROA tend to be more financially stable and better prepared to face crises or financial difficulties compared to companies with low ROA.

Table 2. Developments in the Current Ratio and Debt to Equity Ratio in 2020-2023

Share	Year	Current Ratio (%)	Debt to equity (X)	ROA (X)
JSMR	2020	71,7	320,1	0.024814
	2021	86,2	297,0	0.024101
	2022	102,8	255,7	0.030417
	2023	73,9	232,3	0.042593
	Average	73,9	276,275	0.03
WTON	2020	111,51	60,15	-0.01352
	2021	111,76	61,63	0.007752
	2022	112,36	61,49	0.008995
	2023	117,63	52,49	0.274768
	Average	113,315	58,94	0.07

WSKT	2020	0,32	7,82	-0.08993
	2021	1,56	5,70	-0.01658
	2022	1,58	5,90	-0.01703
	2023	0,99	7,24	-0.04203
	Average	1,1125	6,665	(0.04)
ADHI	2020	111,2	1,7	0.000622217
	2021	101,5	1,9	0.002167901
	2022	120,2	1,2	0.004381735
	2023	113,4	1,3	0.008283266
	Average	111,575	1,525	0.00
PTPP	2020	216,00	42,02	0.004979571
	2021	242,36	48,94	0.006503455
	2022	228,30	56,87	0.006348318
	2023	151,97	79,77	0.024114656
	Average	209.658	56,9	0.01
PPRO	2020	1,39	315,47	0.037583424
	2021	1,77	367,78	0.373231277
	2022	1,53	378,82	0.03064668
	2023	1,01	499,17	0.055132
	Average	1,425	390,56	0.12
WIKI	2020	108,52	0,78	0.000442759
	2021	100,59	0,75	0.003412805
	2022	109,68	3,29	0.238057243
	2023	80,13	5,89	- 0.118587336
	Average	99,73	2,6725	0.03

Source: Construction Sub Sector Financial Report 2020-2023 (Whakatutuki, 2024)

ROA aims to measure the return on invested capital using all assets owned by the company. In line with research conducted by (Dewi, 2017) the industry standard ratio for Current Ratio is 200% or 2 times, if it is more than 200% or 2 times then it is better and if it is less than 200% or 2 times then it is said to be bad. This is in line with research conducted by (Anggarwati, 2024) which states that Return on assets describes the company's ability to gain profits using assets. ROA aims to measure the return on invested capital using all assets owned by the company. The higher the ROA value, the better it is at providing returns to investors. Meanwhile, the influence of a low Debt to Equity Ratio will increase the positive response from the market and the company's ability to pay long-term obligations will be better because the risk arising from the use of funding sourced from debt will be reduced, so shares will rise. Therefore, DER is considered important, both for companies and investors who will invest

their capital. The higher the DER value, the greater the debt the company must pay and this will affect investor interest which will ultimately affect share prices.

Research conducted by (Suharti & Tannia, 2020) stated that the average Debt to Equity Ratio (DER) of 18 sample companies had a percentage above 100%, which indicated an unhealthy financial condition. The ideal DER should be below 1, because the lower the DER value, the higher the company's share price. This is caused by the low DER which reflects that the company's liabilities or debts are smaller than the equity it has.

This is in contrast to research by (Ayu Yowana Agustin, 2022) which states that the Return on Assets Ratio (ROA) is said to be good and good if it is more than 5.98%. In the company PT Grand Titian Residence for the 2017-2021 period, the Return on Assets Ratio (ROA) value was an average of 23.958%, more than 5.98%, so it can be said to be in good condition, which shows that the company PT Grand Titian Residence is efficient in carrying out sales.

1.1 Problem Formulation

Based on the background described earlier, the research problems can be formulated as follows:

- 1) What is the partial effect of the Current Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during the 2020–2023 period?
- 2) What is the partial effect of the Debt-to-Equity Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during the 2020–2023 period?
- 3) What is the simultaneous effect of the Current Ratio and Debt to Equity Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during the 2020–2023 period?

1.2 Research Aim and Objectives

In line with the problem formulation, the objectives of this study are:

- 1) To determine the partial effect of the Current Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during 2020–2023.
- 2) To determine the partial effect of the Debt-to-Equity Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during 2020–2023.
- 3) To determine the simultaneous effect of the Current Ratio and Debt to Equity Ratio on Return on Assets (ROA) in construction sub-sector companies listed on the Indonesia Stock Exchange during 2020–2023.

1.3 Significance of the Study

- Theoretical Significance

The findings are expected to serve as a reference for future research related to the influence of the Current Ratio and Debt to Equity Ratio on Return on Assets (ROA), either by using the same object or expanding to related areas.

- Practical Significance

This study is expected to be beneficial for various parties:

For Companies: The findings can be used to monitor financial health year by year, assist management in identifying areas that need improvement, and help ensure the company remains competitive.

For Researchers: The study can enrich financial knowledge and serve as a reference for further research, particularly in analyzing and predicting the Return on Assets of Indonesian companies.

2. Literature Review

2.1. Financial management

According to (Junaedi, 2024) financial management can be interpreted as the process of managing the financial resources of an organization to achieve certain goals. These objectives vary, starting from maximizing company value, risk management, to optimizing capital structure. In this context financial management is responsible for making intelligent decisions regarding.

2.2. Liquidity Ratio

According to (Kasmir, 2021) the liquidity ratio can be defined as a ratio that shows a company's ability to meet its obligations or pay its short-term debts. In other words, the liquidity ratio is used to measure the extent to which a company is capable of settling its short-term liabilities that are due in the near future.

Current Ratio = (Current Assets) / (Current Liabilities)

2.3. Leverage Ratio

According to (Kasmir, 2021), the Debt to Equity Ratio (DER) measures the extent to which a company is financed by creditors. A higher ratio indicates a greater reliance on external funds. From a solvency perspective, a high ratio is relatively unfavorable, as it could lead to difficulties during liquidation. Conversely, a lower ratio suggests better capability of the company to meet its long-term obligations. Therefore, a high ratio may negatively affect investor perception of the company's ability to provide high returns.

Debt to Equity Ratio = (Total Liabilities) / (Total Equity)

2.4. *Return on Assets (ROA)*

According to (Wirawan et al., 2024), stock return is the rate of return that investors gain from an investment over a certain period of time, defines stock return as the reward received from an investment. Return represents the compensation for the investor's willingness to bear the risk associated with the investment. It is also one of the key factors that motivate investors to invest. Generally, investments with high returns also carry high risks. Stock return consists of two components: capital gain and dividends.

Return on Assets (ROA) = (Net Income) / (Total Assets) × 100%

2.5. *Previous Research*

Several previous studies have examined the influence of financial ratios on company profitability, particularly Return on Assets (ROA). The study conducted by (PA & Marbun, 2016) focused on manufacturing companies and found that the Current Ratio (CR) had a positive and significant effect on ROA, while the Debt to Equity Ratio (DER) had a negative and significant impact. In contrast, (Hidayah & Triyonowati, 2022) analyzed property and real estate companies and concluded that CR had a positive effect on ROA, while DER had a negative but not statistically significant effect. Meanwhile, (Halik et al., 2024) who studied food and beverage companies, reported that CR had no significant impact on ROA, whereas DER had a significant negative effect. These studies highlight that the influence of CR and DER on profitability can vary depending on the industry and company characteristics.

2.6. *Research Hypothesis*

- Hypothesis 1 (H1): Current Ratio Has a Positive Influence on Return on Assets. The Higher the CR, the Better the Company's Ability to Manage Its Current Assets to Increase Profitability.
- Hypothesis 2 (H2): Debt to equity ratio Has a Negative Influence on Return on Assets. The Higher the DER, the Lower the ROA Due to the Larger Debt Burden.

3. **Method, Data, and Analysis**

In this research, the method used is a descriptive and verification method using a quantitative approach. According to (Sugiyono, 2023) descriptive research is research used to answer problem formulations relating to questions regarding the existence of independent variables, whether only on one variable or more. This research utilizes SPSS version 29 as the statistical software tool to process and analyze the data. SPSS (Statistical Package for the Social Sciences) is used to perform descriptive

statistics, classical assumption tests (including normality, multicollinearity, heteroscedasticity, and autocorrelation tests), and hypothesis testing through multiple linear regression analysis.

3.1. Descriptive Analysis Technique

In this study, descriptive analysis is used to explain the general characteristics of the variables: Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Assets (ROA). The descriptive statistics include the minimum, maximum, mean, and standard deviation values. This analysis provides an overview of the distribution and variation of the data from construction sub-sector companies listed on the Indonesia Stock Exchange during 2020–2023.

3.2. Classical Assumption Tests

To ensure the validity of the regression model, the following classical assumption tests are conducted:

1. Normality Test

This test is used to determine whether the residuals from the regression model are normally distributed. The Kolmogorov-Smirnov test is applied. If the significance value is greater than 0.05, the data is considered to be normally distributed.

2. Multicollinearity Test

This test detects multicollinearity between independent variables, CR and DER. The test uses Tolerance and Variance Inflation Factor (VIF) values. Multicollinearity is considered absent if Tolerance > 0.10 and VIF < 10.

3. Heteroscedasticity Test

This test examines whether there is a constant variance of the residuals. It is conducted using the scatterplot method. If the scatterplot shows no clear pattern and the points are randomly distributed, then heteroscedasticity is not present.

4. Autocorrelation Test

The Durbin-Watson (DW) test is used to determine whether there is autocorrelation between residuals. If the DW value falls between 1.5 and 2.5, it indicates that there is no autocorrelation.

3.3. Significance Tests

To examine the effect of Current Ratio and Debt to Equity Ratio on Return on Assets, two types of significance tests are conducted:

1. Partial Significance Test (t-Test)

This test assesses the individual effect of **CR** and **DER** on **ROA**. If the **p-value** is less than 0.05, the variable has a significant effect on the dependent variable.

2. Simultaneous Significance Test (F-Test)

This test evaluates the joint effect of **CR** and **DER** on **ROA**. If the significance value (p-value) is less than 0.05, the independent variables simultaneously have a significant influence on the dependent variable.

3.4. Operational Variables

Table 3. Operational Variables

Variable	Variable Concept	Indicator	Scale
Current Ratio (X1)	The Current Ratio measures a company's ability to pay off its short-term liabilities with its current assets. In this research, it is identified as an independent variable (X) and expressed as a percentage (%)	Current Ratio development in the period 2020–2023: CR = Current Assets / Current Liabilities	Ratio
Debt to Equity Ratio (X2)	Debt to Equity Ratio (DER) is a metric that compares total debt to shareholders' equity, used to measure the extent to which a company is financed by creditors. It is an independent variable (X) and expressed in times (x).	Debt to Equity development in the period 2020–2023: DER = Total Debt / Shareholders' Equity	Ratio
Return on Assets (Y)	Return on Assets (ROA) measures how efficiently a company uses its assets to generate profit. ROA reflects the company's effectiveness in utilizing its assets to produce earnings.	ROA development in the period 2020–2023: ROA = Net Income / Total Assets × 100%	Ratio

Source: Processed Data by the Author, 2024

3.5. Conceptual Framework

The conceptual framework of this study illustrates the relationship between the independent variables and the dependent variable. The independent variables are Current Ratio (CR) and Debt to Equity Ratio (DER), which represent a company's liquidity and leverage. The dependent variable is Return on Assets (ROA), which measures the company's financial performance. This framework is designed to analyze how CR and DER, both individually and simultaneously, influence ROA. The assumption is that a higher Current Ratio reflects better liquidity, potentially increasing ROA, while a higher DER may indicate financial risk, which could reduce ROA. The analysis will help to determine whether these financial ratios significantly affect profitability in construction sub-sector companies listed on the Indonesia Stock Exchange from 2020 to 2023.

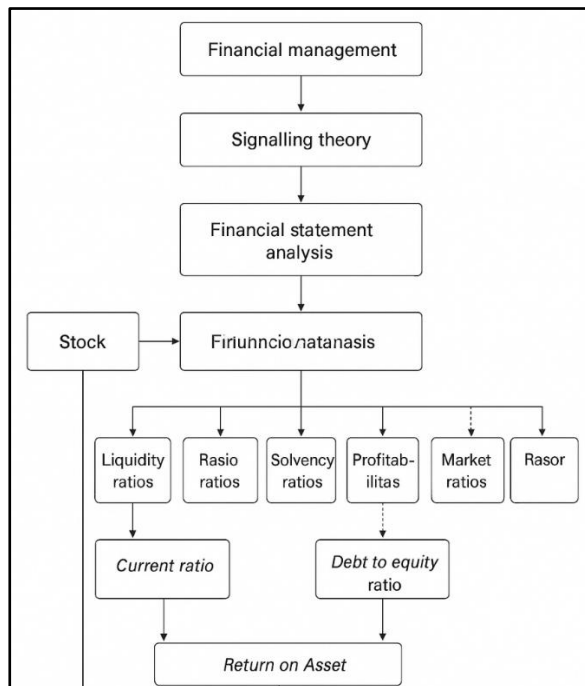


Figure 1. Conceptual Framework

Source : Processed Data by the Author, 2024

3.6. Population

The population in this study consists of all construction and building subsector companies listed on the Indonesia Stock Exchange (IDX), totaling 29 firms.

Table 4. Research Sample Criteria

NO	Share	issuer
1	ACST	Acset Indonusa Tbk.
2	ASLI	Asri Karya Lestari Tbk.
3	ADHI	Adhi Karya (Persero) Tbk.
4	BDKR	Berdikari Pondasi Perkasa Tbk
5	BUKK	Bukaka Teknik Utama Tbk.
6	DGIK	Nusa Konstruksi Enjiniring Tbk
7	FIMP	Fimperkasa Utama Tbk
8	IDPR	Indonesia Pondasi Raya Tbk.
9	JKON	Jaya Konstruksi Manggala Pratama
10	KOKA	Koka Indonesia Tbk.
11	KRYA	Bangun Karya Perkasa Jaya Tbk
12	MANG	Manggung Polahraya Tbk
13	MTPS	Meta Epsi Tbk.
14	MTRA	Mitra Pemuda Tbk.
15	NRCA	Nusa Raya Cipta Tbk.
16	PBSA	Paramita Bangun Sarana Tbk.
17	PPRE	PP Presisi Tbk.
18	PTDU	Djasa Ubersakti Tbk.
19	PTPP	PP (Persero) Tbk.

NO	Share	issuer
20	PTPW	Pratama Widya Tbk.
21	RONY	Aesler Grup Internasional Tbk.
22	SMKM	Sumber Mas Konstruksi Tbk
23	SSIA	Surya Semesta Internusa Tbk.
24	TAMA	Lancartama Sejati Tbk.
25	TOPS	Totalindo Eka Persada Tbk.
26	TOTL	Total Bangun Persada Tbk.
27	WEGE	Wijaya Karya Bangunan Gedung T
28	WIKA	Wijaya Karya (Persero) Tbk.
29	WSKT	Waskita Karya (Persero) Tbk.

Source : Processed Data by the Author, 2024

3.7. Sample

Purposive sampling technique is a technique for determining sample data with certain considerations. The reason for selecting samples using purposive sampling is because not all samples have criteria that match those specified by the author.

Table 5. Research Sample Criteria

No	Criteria	Amount
1.	Companies that are consistently listed on the IDX in the construction and building subsector during the 2019-2023 period.	29
2.	companies that publish complete annual financial reports during the research period.	15
3.	companies that have Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Asset (ROA) data that are available and valid in their financial reports.	4
Total sample		10

Source : Processed Data by the Author, 2024

The 10 companies were selected using purposive sampling based on specific criteria: consistently listed firms with complete financial reports and valid CR, DER, and ROA data. Although the firm count is limited, the use of 5-year panel data (2019–2023) results in 50 firm-year observations, which is sufficient for statistical analysis.

4. Result and Discussion

4.1. Descriptive Statistical Analysis

Table 6. Descriptive Statistics Table

	N	Descriptive Statistics			
		Minimum	Maximum	Mean	Std. Deviation
X1	10	3.13	7.67	5.1490	1.46034
X2	10	2.20	24.21	10.2580	8.07517
Y	10	-1.62	.32	-.0686	.56283
Valid N (listwise)	10				

Source : Processed Data by the Author, 2024

The descriptive statistics table shows the distribution of values for each variable analyzed in this study:

- **X1 (Current Ratio)** has a mean of 5.1490 and a standard deviation of 1.46034, indicating moderate variability around the mean.
- **X2 (Debt to Equity Ratio)** has a wide value range (2.20 to 24.21) and a higher standard deviation (8.07517), showing considerable variation across observations.
- **Y (Return on Assets)** has a negative mean (-0.0686), suggesting that, on average, the companies experienced negative profitability. The relatively moderate standard deviation (0.56283) shows some variation in performance, but most values tend to be on the negative side.

Implications:

The negative average ROA indicates that many of the sampled companies continue to face challenges in achieving profitability, likely due to elevated debt levels, as reflected in the high average DER. This finding supports the hypothesis that a higher debt-to-equity ratio adversely affects profitability. In contrast, the moderate CR values suggest that some companies are able to maintain adequate liquidity, which may contribute to improved long-term performance. Overall, these results highlight the importance of balancing debt management with sufficient liquidity to ensure financial sustainability in the construction sector.

4.2. Data Normality Test Results

Table 7. Normality Test (Kolmogorov-Smirnov) Table

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		10
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.46860318

Most Extreme Differences	Absolute		.228
	Positive		.161
	Negative		-.228
Test Statistic			.228
Asymp. Sig. (2-tailed) ^c			.151
Monte Carlo Sig. (2-tailed) ^d	Sig.		.149
	99% Confidence Interval	Lower Bound	.140
		Upper Bound	.158

Source : Processed Data by the Author, 2024

- a. Test distribution is Normal.
 - b. Calculated from data.
 - c. Lilliefors Significance Correction.
 - d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed
- It can be concluded that the normality test uses the Kolmogorov Smirnov method analysis test tool. Get asymp results. Sig 0.158 which means > 0.05.

4.3. Multicollinearity Test Results

Table 8. Multicollinearity Test Table

Model		Coefficients ^a	
		Collinearity Statistics	
		Tolerance	VIF
1	Current Ratio	.465	2.151
	Debt to Equity Ratio	.465	2.151

a. Dependent Variable: Return On Asset

Source : Processed Data by the Author, 2024

The collinearity statistics for the independent variables in the model, including Tolerance and Variance Inflation Factor (VIF), indicate no significant multicollinearity issues. Both the Current Ratio and Debt to Equity Ratio have identical Tolerance values of 0.465 and VIF values of 2.151, which are well below the problematic threshold of a VIF greater than 10. These results confirm that the regression model is valid and stable for analyzing the influence of the Current Ratio and Debt to Equity Ratio on Return on Assets (ROA).

4.4. Heteroscedasticity Test Results

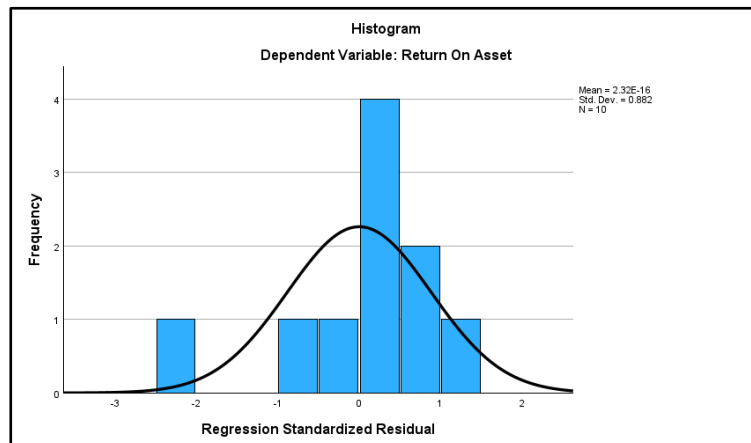


Figure 1. Heteroscedasticity Test Figure

Source : Processed Data by the Author, 2024

The heteroscedasticity test indicates that the points are randomly distributed around 0 on the Y-axis, confirming the absence of heteroscedasticity. This ensures that the regression model is suitable for use.

4.5. Autocorrelation Test Results

Table 8. Autocorrelation Test (Durbin-Watson) Table

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.799 ^a	.639	.536	.266	1.632

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y1

Source : Processed Data by the Author, 2024

The R Square value of 0.639 indicates that 63.9% of the variation in ROA is explained by the Current Ratio and Debt to Equity Ratio, showing a strong relationship. The Adjusted R Square of 0.536 confirms the model's reliability. A Standard Error of 0.266 suggests moderate prediction accuracy. The remaining 36.1% is influenced by other factors. The Durbin-Watson value of 1.632 indicates no autocorrelation, validating the regression model.

4.6. Multiple Linear Regression Analysis

Table 9. Regression Coefficients Table

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.732	.595		-1.229	.259
	X1	.155	.089	.580	1.741	.125
	X2	-.013	.016	-.271	-.813	.443

a. Dependent Variable: Y1

$$Y = a + b_1X_1 + b_2X_2 \dots \dots \dots (1)$$

Source : Processed Data by the Author, 2024

Note:

Y= Return on Assets

X1= Current Ratio (CR)

X2= Debt to Equity Ratio (DER)

a= Y value if X = 0 (constant value)

b= Direction number or regression coefficient

The regression results show that neither the Current Ratio nor the Debt-to-Equity Ratio significantly affects ROA at the 95% confidence level. The Current Ratio has a positive but insignificant influence ($p = 0.125$; $\beta = 0.580$), while the Debt-to-Equity Ratio has a negative and also insignificant effect ($p = 0.443$; $\beta = -0.271$). The constant is negative but not significant. These results suggest that other factors may better explain ROA.

4.7. Correlation Coefficient Analysis

Table 10. Correlation Coefficient Table

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.799 ^a	.639	.536	.266	1.632

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y1

Source : Processed Data by the Author, 2024

a correlation coefficient (R) of 0.799, indicating a strong relationship between the Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Assets (ROA), as the value falls within the range of 0.40–0.599, signifying a robust association.

4.8. Analysis of the Coefficient of Determination (R^2)

Table 11. Coefficient of Determination (R^2) Table

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.799 ^a	.639	.536	.266	1.632

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y1

Source : Processed Data by the Author, 2024

The R Square value of 0.639 (63.9%) indicates that the Current Ratio (CR) and Debt to Equity Ratio (DER) explain 63.9% of the variation in Return on Assets (ROA), while the remaining 36.1% is influenced by factors outside the model, such as operational efficiency or market conditions.

4.9. The Simultaneous Effect of Current Ratio and Debt to Equity Ratio on Return on Assets

The simultaneous analysis results indicate that the Current Ratio (CR) and Debt to Equity Ratio (DER) together have a significant effect on Return on Assets (ROA) in construction and building companies listed on the Indonesia Stock Exchange (IDX) during the period 2020-2023. Based on the ANOVA test, the calculated F-value is 6.197 with a significance level of 0.028, which is less than 0.05. This shows that statistically, CR and DER simultaneously have a significant impact on ROA. At a 95% confidence level, the Current Ratio (X1) and Debt to Equity Ratio (X2) together contribute to changes in the company's profitability, although there are still other factors influencing overall financial performance. These results demonstrate that the combination of these two independent variables plays a role in explaining variations in ROA.

Furthermore, the Current Ratio and Debt to Equity Ratio together reflect a balance between liquidity management and capital structure, which affects the effectiveness of asset utilization in generating profits. These findings confirm that good management of current assets and liabilities is crucial in improving the company's profitability. (Ammy & Hasibuan, 2021) The results also concluded that the current ratio variable does not have a significant effect on return on assets in manufacturing companies on the Indonesia Stock Exchange. In addition, the results of other studies also conclude that the current ratio has no partial effect on return on assets in property and real estate companies listed on the Indonesia Stock Exchange for the period 2012-2015. In line with research results (Darmono, 2024), research results show that liquidity (CR) does not have a significant effect on dividend policy. Meanwhile, profitability (ROA) and solvency (DER) have a significant effect on dividend policy.

Simultaneously, the three independent variables have a significant effect on dividend policy with a coefficient of determination of 61.54%, while the remainder is influenced by other factors not examined in this research.

This is in contrast to research conducted by (Prastiwi et al., 2024) revealed that there is a positive and strong correlation between DER and the company's profit growth rate. This is supported by the t test results which are very significant (p-value = 0.022). Higher levels of debt or leverage can increase a company's return on equity when the company generates profits in excess of borrowing costs. By utilizing debt strategically, companies have the potential to accelerate profit growth. In addition, interest expenses on debt are tax protected, which means the company's tax burden is reduced resulting in higher net profits. These tax advantages can contribute positively to overall profit growth. The use of debt can provide a company with additional funding sources that can be leveraged for expansion, investment, and profitable projects, which can ultimately increase profits. However, this only happens if the company can generate profits that are higher than the cost of debt

5. Conclusion and Suggestion

The research analyzed the impact of the Current Ratio (CR) and Debt to Equity Ratio (DER) on Return on Assets (ROA) in construction and building companies listed on the IDX during 2020–2023. Key findings show that the Current Ratio in the construction subsector declined over the period, with an average range between 1.022 and 1.445. The highest CR was 2.17 in 2021, and the lowest was 1.1 in 2022. Conversely, the Debt-to-Equity Ratio consistently increased, averaging 3.02, with a peak of 8.43.

Partial tests revealed that CR has a positive and significant effect on ROA, indicating that optimizing current assets and managing liquidity effectively can improve asset profitability. Meanwhile, DER has a negative and significant effect on ROA, highlighting the risks of excessive leverage which can erode returns if not managed prudently. For construction companies, the findings indicate that improving ROA requires a strategic focus on optimizing current assets to strengthen liquidity, while simultaneously managing debt levels to maintain a sound capital structure and mitigate financial risk. Effective asset utilization and prudent debt management are therefore essential for sustaining profitability in this sector. For investors, the Current Ratio and Debt-to-Equity Ratio should be viewed as complementary indicators of liquidity and financial risk rather than as standalone metrics. While these ratios provide valuable insights, they must be interpreted alongside other financial and operational factors to support more comprehensive investment decisions.

Future research is recommended to incorporate additional financial variables, such as Total Asset Turnover and Net Profit Margin, to provide a more comprehensive understanding of the

determinants of ROA. Moreover, including non-financial factors such as leadership quality and government project involvement could yield valuable insights into the broader influences on company performance. Overall, this study reaffirms the significant role of CR and DER in explaining variations in ROA, while emphasizing the importance of holistic financial management. It also highlights the need for multi-dimensional research to better inform companies, investors, and policymakers in the construction industry.

6. Reference

- Adi Ahdiat. (2023). *Gross Domestic Product (GDP) Construction Sub Sector 2019-2021*. Databooks. <https://databoks.katadata.co.id/ekonomi-makro/statistik/67a5cb33abdfd/industri-pengolahan-sektor-usaha-dengan-pdb-terbesar-pada-2024>
- Ammy, B., & Hasibuan, J. S. (2021). The Influence of Current Ratio and Debt to Equity Ratio on Return On Assets In construction and building companies listed on the Indonesia Stock Exchange. *International Journal of Economic, Technology and Social Sciences*, 1(1), 117–128. <http://jurnal.ceredindonesia.or.id/index.php/injects/article/view/391>
- Anggarwati, K. (2024). PENGARUH ROA , DER , DAN ROE TERHADAP STOCK PRICE (Studi Pada Perusahaan Sub Sektor Konstruksi Bangunan Yang Terdaftar Di Bursa Efek Indonesia Periode 2018-2022) THE INFLUENCE OF ROA , DER , AND ROE ON STOCK PRICE (Study of Building Construction Sub-Se. *Jurnal Intelek Dan Cendikiawan Nusantara*, 1(September), 5321–5327.
- Ayu Yowana Agustin. (2022). Analisis Rasio Profitabilitas untuk Mengukur Kinerja Keuangan Pada PT. Kimia Farma Tbk Pada Tahun 2019-2021. *Jurnal Ilmu Manajemen Dan Bisnis*, 13(1), 1–7.
- Darmono, D. (2024). The Effect of Liquidity, Profitability, and Solvency Ratios on Stock Prices in Mining Companies Listed on the Indonesia Stock Exchange (IDX). *International Journal of Social Science and Human Research*, 07(01), 1–15. <https://doi.org/10.47191/ijsshr/v7-i01-15>
- Dewi, P. E. D. M. (2017). Pengaruh Rasio Likuiditas, Profitabilitas, Solvabilitas, Aktivitas Dan Penilaian Pasar Terhadap Return Saham. *Jurnal Ilmiah Akuntansi*, 1(2), 109–132. <https://doi.org/10.23887/jia.v1i2.9988>
- Halik, B. R., Supeni, E., & Danirizka, Y. S. (2024). *Profitabilitas Perusahaan Makanan dan Minuman (2020-2022) : Dampak dari Ukuran Perusahaan , Inflasi , dan Leverage*. 2(2), 82–94.
- Hidayah, N. N., & Triyonowati. (2022). Penagruh Likuiditas, Profitabilitas, Dan Leverage Terhadap Harga Saham Pada Perusahaan Property And Real Estate Yang Terdaftar Di BEI. *Jurnal Ilmu Dan Riset Manajemen*, 11(11), 1–18. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/5002/5015>

- Junaedi. (2024). *Dasar- Dasar Manajemen Keuangan : Teori dan Praktik* (Edisi Pert). Tazaka Innovatix.
- Kasmir. (2021). *Pengantar Manajemen Keuangan* (Edisi Kedu). Prenadamedia Group.
- Kusuma, E. (2016). PENGARUH LIKUIDITAS, LEVERAGE DAN PROFITABILITAS TERHADAP FINANCIAL DISTRESS (Z-SCORE) PERUSAHAAN PROPERTY, REAL ESTATE, DAN MANUFAKTUR PERIODE 2014-2016. *Applied Microbiology and Biotechnology*, 85(1), 6.
- PA, M., & Marbun, D. (2016). Pengaruh Current Ratio Dan Debt To Equity Ratio Terhadap Return On Assets. *Widyakala Journal*, 3(2), 23. <https://doi.org/10.36262/widyakala.v3i0.21>
- Prastiwi, F. P., Rinofah, R., & Maulida, A. (2024). *THE INFLUENCE OF CURRENT RATIO , TOTAL ASSET TURNOVER , DEBT- TO-EQUITY RATIO ON PROFIT GROWTH IN HOTEL , RESTAURANT , AND TOURISM SUB-SECTOR COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE IN THE PERIOD OF 2018-2022*. 1, 81–87.
- Setowening1, S., & Djuminah, D. (2024). *Determinants of financial distress in the building construction sub-sector companies listed on the Indonesia Stock Exchange*. 6(1).
- Sugiyono, P. D. (2023). *Metode Penelitian* (P. D. Sunarto (ed.); Cetakan Pe). Alfabeta, Bandung. [http://eprints.upnyk.ac.id/27727/1/Buku Metode Penelitian Komunikasi.pdf](http://eprints.upnyk.ac.id/27727/1/Buku%20Metode%20Penelitian%20Komunikasi.pdf)
- Suharti, S., & Tannia, Y. (2020). Analisis Pengaruh Debt to Equity Ratio, Debt to Asset Ratio, Price Earning Ratio dan Price to Book Value Terhadap Harga Saham Pada Perusahaan Sektor Pertanian. *INVEST : Jurnal Inovasi Bisnis Dan Akuntansi*, 1(1), 13–26. <https://doi.org/10.55583/invest.v1i1.19>
- Whakatutuki, H. (2024). *Building and Construction Sector Trends*. <https://www.mbie.govt.nz/assets/building-and-construction-sector-trends-annual-report-2023.pdf>
- Wirawan, N. E., Ong, V., Hilda, S., Putri, A. P., Silalahi, A. D., Nababan, T., Ekonomi, F., & Indonesia, U. P. (2024). *Volu me 6 No . 1 / 1 April Tahun 2024 FAKTOR RASIO KEUANGAN TERHADAP RETURN SAHAM PERUSAHAAN* ISSN : 2088-6136 E-ISSN : 2721-9291. 1, 1–13.