



Solvability and Profitability Ratio Analysis to Assess Financial Performance at PT. United Tractors.Tbk

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Article Info

Article history:

Received 2 August 2025

Received in revised form 17

August 2025

Accepted 5 September 2025

Keywords:

Solvency Ratio

Profitability Ratio

Financial Performance

PT United Tractors Tbk

Financial Analysis

Abstract

This study aims to analyze the solvency and profitability ratios in assessing the financial performance of PT United Tractors Tbk for the period 2019–2023. The solvency ratios examined include the Debt to Equity Ratio (DER) and the Debt to Asset Ratio (DAR), while the profitability ratios consist of Return on Assets (ROA) and Return on Equity (ROE). These two categories of ratios were prioritized because they directly reflect the company's capital structure and efficiency in generating profits, which are crucial in capturing financial resilience during periods of economic uncertainty. The analysis employed secondary data drawn from audited annual reports of PT United Tractors Tbk published by the Indonesia Stock Exchange and the company's official website. The results indicate that solvency and profitability fluctuated throughout the study period. The sharp decline in 2020 coincided with the COVID-19 pandemic, which disrupted global demand for heavy equipment, while the improvement in ROA and ROE during 2022–2023 reflected stronger asset utilization supported by industry recovery and infrastructure expansion. Nevertheless, the increase in DER in 2023 signaled greater reliance on debt financing. This study concludes that maintaining a balance between solvency and profitability is essential for sustainable financial performance. However, since the analysis was limited to solvency and profitability ratios, future studies are encouraged to incorporate liquidity, efficiency, and market-based indicators to provide a more comprehensive picture of financial health.

Introduction

Financial performance is the primary indicator used by stakeholders to assess a company's stability and prospects. One method commonly used in financial analysis is the use of financial ratios, particularly solvency and profitability ratios. Solvency ratios illustrate a company's ability to meet its long-term obligations, while profitability ratios indicate the company's efficiency in generating profits from its operational activities (Tasman et al., 2020; Fikri & Yolanda, 2023; Rahman, 2017; Blessing & Sakouvogui, 2023). The study of financial ratios is important because it can provide a clear picture of a company's financial health and provide a basis for decision-making for investors, creditors, and internal management. Although financial performance can also be assessed using liquidity, efficiency, and market-based indicators, this study specifically focuses on solvency and profitability ratios (Ogachi, 2021; Rahiminezhad et al., 2022; Diana, 2020; Youssef, 2024). These two categories of ratios are prioritized because they most directly capture the trade-off between capital structure and profit generation, while other indicators are acknowledged as outside the scope of this study and constitute a limitation for future research.

The study of financial ratio analysis is becoming increasingly important because it can provide a clear picture of a company's financial health and serve as a basis for decision-making for investors, creditors, and internal management (Babalola & Abiola, 2013; Olayinka, 2022; Andjelic & Vesic, 2017; Blessing & Sakouvogui, 2023). As stated by Dharma et al. (2022), in financial statement analysis, solvency and profitability ratios are key instruments for assessing an entity's financial position and operational performance. PT United Tractors Tbk is one of Indonesia's largest companies engaged in heavy equipment, mining, and construction. The company plays a strategic role in the mining and infrastructure industries, and its financial condition reflects the sector's overall stability. In recent years, the heavy equipment industry has faced various challenges, including fluctuating commodity prices, regulatory changes, and the impact of the COVID-19 pandemic, which has shaken global markets (BPS, 2023; Norouzi, 2021; Rajput et al., 2020; Olujobi et al., 2022). Therefore, analyzing PT United Tractors Tbk's solvency and profitability ratios is crucial to assess how the company has addressed these challenges and its performance over the 2019- 2023 period.

Brigham (2019), solvency ratios such as Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) are very important in assessing a company's capital structure, while profitability ratios such as Return on Assets (ROA) and Return on Equity (ROE) reflect the company's ability to generate profits from its assets. Financial report data from PT United Tractors Tbk shows that in recent years, the company has experienced fluctuations in its net profit due to instability in the commodity market and global monetary policy (Financial Report of PT United Tractors, 2023). According to other studies, factors such as the Capital Adequacy Ratio (CAR) and the Financing to Deposit Ratio (FDR) also have a significant impact on profitability (Rahmani, 2017; Syifa, 2018; Febriyanata & Achyani, 2023; Suroso, 2022). Therefore, an in-depth analysis of solvency and profitability ratios is important to understand how a company manages its capital and operational strategies.

The phenomena occurring in the heavy equipment and mining industry are significantly influenced by global economic conditions and domestic policies (Wu et al., 2017; Pérez-Trujillo, 2024). PT United Tractors Tbk, as an industry leader, faces significant challenges due to the COVID-19 pandemic, which has led to a decline in demand for heavy equipment and mining services. Based on its annual financial report, there have been significant fluctuations in the company's net profit from 2019 to 2023, indicating challenges in maintaining profitability amidst economic pressures (PT United Tractors, 2023). The sharp decline in profitability in 2020 coincided with the COVID-19 pandemic, which disrupted global demand across capital-intensive industries. Conversely, the recovery in 2022–2023 was supported by rising commodity prices, government-led infrastructure projects, and stronger market demand for heavy equipment. These dynamics illustrate how external shocks and policy interventions have directly shaped the solvency and profitability ratios of PT United Tractors.

Table 1. Company net profit from 2019 to 2023

Year	Net Profit (in Rupiah)	triliun	Debt to (DER)	Equity	Ratio	Return on Assets (ROA)
2019	11,3			0,6		8,5%
2020	6,0			0,8		7,8%
2021	10,3			1,0		6,2%
2022	21,0			1,1		6,8%
2023	18,3			1		6%

Source: PT United Tractors Tbk Annual Reports (2019–2023), processed by the authors (2025)

Furthermore, the company's capital structure has also changed due to expansion and acquisition policies implemented in recent years. According to theory Modigliani & Miller (1963), the optimal composition of the capital structure can significantly impact a company's value. Given the increase in debt in recent years, it is important to assess whether the company's solvency ratio remains healthy and whether the financial strategies adopted have positively impacted profitability.

Based on PT United Tractors Tbk's financial report data, the Debt to Equity Ratio (DER) increased from 0.6 in 2019 to 1.1 in 2022, indicating increased reliance on external financing (PT. United Tractors, 2023). Meanwhile, Return on Assets (ROA) decreased from 8.5% in 2019 to 6.2% in 2021, reflecting a decline in the efficiency of asset utilization to generate profits.

From a financial theory perspective, Myers (1984) suggests that highly leveraged companies tend to face greater financial risk, especially when earnings are unstable. Therefore, it is important to analyze how PT United Tractors Tbk's capital structure has affected its profitability over the past five years. By understanding the relationship between solvency ratios and profitability, this study can provide insights for companies in developing more effective financial strategies to improve their future financial performance.

Furthermore, research by Barokah et al. (2023) states that fee-based income, profit-sharing spread, and the financing-to-deposit ratio (FDR) have a significant influence on Return on Assets (ROA). This is relevant considering that PT United Tractors also diversifies its business to maintain profitability amidst market fluctuations.

Another study by Rasyiddin et al. (2022) also shows that profit is not only influenced by operating income but is also closely related to tax management and overall financial management strategy. This reinforces the importance of analyzing not only revenue but also cost structure and corporate policies.

In financial management, corporate control is crucial because it plays a role in ensuring effective resource management, decision-making, and the achievement of long-term financial goals (Jain, 2024; Shaheen, 2023; Permata, 2023; Isibor et al., 2022). A strong control system helps direct managerial behavior to align with shareholder interests and prevent misappropriation of assets and distortion of financial statements. According to Hidayah & Saptantinah (2025), internal controls, such as integrated accounting information systems, have been shown to increase the effectiveness of online cash management, which has direct implications for the transparency and financial efficiency of modern companies. This is also supported by Ryntho (2024), who stated that a cash accounting system that does not conform to theory reflects a company's weak internal control system and can hinder the accuracy of financial reporting.

Companies formulate their optimal capital structure through a trade-off theory approach: balancing the tax-saving benefits of debt with the risk of bankruptcy if debt levels are too high. In practice, the debt-to-equity ratio (D/E ratio) is actively monitored. As a benchmark, similar companies in non-capital-intensive industries like technology maintain an average D/E below 0.00, while capital-intensive industries like utilities can maintain a range of 1.5–2.5. A real-life example: Netflix reduced its D/E from 1.97 in 2019 to 0.71 in 2023 through a \$20.5 billion equity raise and debt restrictions while continuing to invest heavily in content. The strategy included refinancing long-term debt, maintaining positive operating cash flow, and building a retained earnings buffer to avoid relying entirely on debt. Therefore, pecking-order theory

guides companies to use internal funding (retained earnings) first, then borrow, and finally issue shares. This process makes companies more likely to reduce debt when profitability increases—because profits are used to pay off existing debt, and refinancing that supports long-term cash flow. As a result, profits and debt obligations run parallel, meaning productive debt remains financed, profits are sufficient to cover interest and principal, and there is potential for growth through internal financing.

Based on the background and phenomena described above, this study aims to analyze the solvency and profitability ratios of PT United Tractors Tbk for the 2019-2023 period and how these two ratios influence the company's financial performance. Therefore, the results of this study are expected to provide academic contributions to the field of financial management and recommendations for company management and other stakeholders. By limiting the analysis to solvency and profitability, this study emphasizes the critical link between debt management and profit efficiency, while recognizing that other financial dimensions remain important for future exploration.

Methods

This study employs a quantitative descriptive approach to evaluate the financial performance of PT United Tractors Tbk by analyzing solvency and profitability ratios. The focus on these two ratios is chosen because they are considered the most relevant in reflecting the relationship between capital structure and profit efficiency, which is particularly crucial in capital-intensive industries such as heavy equipment and mining.

The data used in this study are secondary data obtained from the audited Annual Reports of PT United Tractors Tbk for the period 2019–2023, officially published by the Indonesia Stock Exchange (IDX) and the company's official website. The reports include the consolidated balance sheet, income statement, and cash flow statement.

From these reports, the following figures were extracted: total liabilities (debt), total assets, total equity, and net profit after tax. These figures were then processed to calculate the research variables using the following formulas: 1) Debt to Equity Ratio (DER) = Total Debt ÷ Total Equity (obtained from the balance sheet); 2) Debt to Asset Ratio (DAR) = Total Debt ÷ Total Assets (obtained from the balance sheet); 3) Return on Assets (ROA) = Net Profit After Tax ÷ Total Assets (net profit obtained from the income statement; total assets from the balance sheet); 4) Return on Equity (ROE) = Net Profit After Tax ÷ Total Equity (net profit obtained from the income statement; total equity from the balance sheet).

All data were presented in Indonesian Rupiah (IDR) as officially reported in the company's financial statements. No adjustments for inflation or foreign currency translation (e.g., USD) were applied, in order to maintain consistency with the audited figures. The accounting practices during 2019–2023 were consistent with the Indonesian Financial Accounting Standards (PSAK), which are aligned with International Financial Reporting Standards (IFRS), thereby ensuring comparability across the years of analysis.

The use of secondary data provides reliability, since the reports are audited and publicly accessible. However, this approach also has inherent limitations: it only represents formally reported quantitative figures and does not capture qualitative aspects such as managerial decision-making, industry dynamics, regulatory changes, or global economic shocks. Thus, the findings of this study should be interpreted strictly within the scope of ratio analysis and not as a comprehensive assessment of the company's overall financial health.

Results and Discussion

Corellation Test

Table 2. Pearson Correlation

		DER	DAR	ROA	ROE
DER	Pearson correlation	1	0,993	0,442	0,486
	Sig.(2-tailed)	-	0,001	0,4564	0,4060
	N	5	5	5	5
DAR	Pearson correlation	0,993	1	0,445	0,483
	Sig.(2-tailed)	0,001	-	0,4525	0,4103
	N	5	5	5	5
ROA	Pearson correlation	0,442	0,445	1	0,807
	Sig.(2-tailed)	0,4564	0,4525	-	0,0980
	N	5	5	5	5
ROE	Pearson correlation	0,486	0,483	0,807	1
	Sig.(2-tailed)	0,4060	0,4103	0,0980	-
	N	5	5	5	5

Source: SPSS (2025)

Solvency Ratio

The calculation of solvency ratios, namely the Debt to Asset Ratio (DAR) and the Debt to Equity Ratio (DER), shows fluctuations during the period 2019–2023. In 2019, the ratios were relatively stable, but in 2020 a significant decline in DAR was observed. This decrease cannot be separated from the global impact of the COVID-19 pandemic, which caused a downturn in the heavy equipment and mining industries. Faced with this uncertainty, the company adopted a more conservative debt policy to safeguard liquidity and maintain operational continuity. In the following years (2021–2022), solvency ratios showed an upward trend as economic activities gradually recovered and demand for heavy equipment and mining services improved. A more notable increase occurred in 2023, reflected in a higher DER. This development was not merely a financial fluctuation but was associated with strategic corporate decisions. According to the *Annual Report 2023*, United Tractors expanded its fleet, diversified into the renewable energy sector, and took part in national infrastructure projects, all of which required additional financing through debt.

When compared with industry standards, United Tractors' DAR, which remained in the range of 35%–45%, is still considered moderate. Benchmark data for the heavy equipment and mining sector generally indicate a DAR range of 35%–50%. This comparison suggests that United Tractors' solvency policy is aligned with industry norms, although shifts can be seen between more conservative strategies (2020) and more aggressive strategies (2023).

Table 3. Debt Asset Ratio Pada Pt. United Tractors.Tbk Periode 2019-2023

Year	Total Debt (a)	Total Assets (b)	<i>Debt To Asset Ratio</i> $c = \frac{a}{b}$
2019	50,603,301	111,713,375	45,30%
2020	36,653,823	99,800,963	36,73%
2021	40,738,599	112,561,356	36,20%
2022	50,964,395	140,478,220	36,28%

2023	69,992,386	154,028,248	45,45%
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Source: Data processed from pt.united tractors. tbk

Based on processed data, the Debt-to-Asset Ratio (DAR) of PT. United Tractors Tbk from 2019 to 2023 showed significant fluctuations. The Debt-to-Asset Ratio is used to assess the extent to which a company is financed by debt compared to its assets. This ratio provides an overview of a company's solvency, namely its ability to meet its long-term obligations, particularly debt.

In 2019, this ratio was recorded at 45.30%, indicating that nearly half of the company's total assets were financed by debt. This is a relatively high figure, indicating a significant dependence on debt to support the company's activities.

In 2020, this ratio decreased to 36.73%, indicating a decrease in dependence on debt. This could indicate the company is reducing its debt or increasing its equity and assets. This could signal a healthier company and less reliance on debt.

From 2021 to 2022, this ratio remained relatively stable at 36.20% and 36.28%, respectively, indicating that the company maintained a relatively low debt-to-total-assets ratio, suggesting that the company was quite cautious in using debt.

In 2023, this ratio increased again to 45.45%, similar to the 2019 figure. This indicates an increased reliance on debt to finance the company's assets, which may indicate that the company is taking on more debt to fund expansion or other operational needs.

Overall, the average Debt-to-Asset Ratio for the 2019-2023 period was 39.99%. This indicates that, in general, approximately 40% of the company's total assets are financed by debt. This figure indicates that the company is in a relatively balanced position in its use of debt, although there have been some years with significant fluctuations.

A high figure (e.g., 45.30% in 2019 and 45.45% in 2023) may indicate the company is quite dependent on debt, which can increase financial risk if not managed properly, especially in unstable economic conditions.

A low figure (e.g., 36.20% to 36.73%) indicates the company is more conservative in its use of debt, which can reduce the risk of bankruptcy but may also limit its growth potential.

The company appears to be trying to balance the use of debt and equity to support operations and expansion, while maintaining healthy solvency.

Table 4. Debt Asset Ratio Pada Pt. United Tractors.Tbk Period 2019-2023

Year	Total Debt (a)	Total Assets (b)	Debt To Equity Ratio
			$\frac{a}{b}$
2019	50,603,301	61,603,301	82,80%
2020	36,653,823	63,147,140	58,04%
2021	40,738,599	71,882,757	56,67%
2022	50,964,395	89,513,825	56,93%
2023	69,992,386	84,035,563	83,28%
	Average		67,54%

Source: data processed from pt.united tractors.tbk

In this analysis, the Debt to Equity Ratio (DER) is calculated by comparing a company's total debt to its total equity. This ratio measures the extent to which a company is financed by debt compared to equity held by shareholders. The higher this ratio, the greater the company's dependence on debt.

Profitability Ratios

The analysis of profitability ratios, measured by Return on Assets (ROA) and Return on Equity (ROE), reveals considerable fluctuations throughout the period of study. In 2020, both indicators declined in line with the global economic downturn triggered by the COVID-19 pandemic, which significantly disrupted demand in the heavy equipment and mining industries. This decline reflected the contraction in operational activities and reduced efficiency in asset utilization.

A recovery began in 2021 and was more pronounced in 2022–2023, when ROA and ROE showed notable increases. This improvement was strongly supported by external market conditions, particularly the sharp rise in global coal prices (World Bank, 2023) and the rebound in infrastructure development projects in Indonesia, which stimulated higher demand for heavy equipment.

Evidence from the 2022 and 2023 *Annual Reports* substantiates this trend (PT United Tractors Tbk, 2023). The company recorded growth in heavy equipment sales, higher revenues from its mining contracting subsidiary, and improved profitability in the construction machinery segment. Additionally, efficiency initiatives and cost-control programs contributed to an increase in net profit, which in turn elevated ROA and ROE. These verifiable data points strengthen the analysis by grounding the interpretation in documented financial performance, rather than speculative reasoning.

It is also important to note that the rise in ROE during 2023 was not solely driven by stronger operational results, but was partly amplified by higher leverage in the same year (PT United Tractors Tbk, 2023). This demonstrates the interaction between solvency and profitability: while debt financing can enhance returns to equity holders during favorable market conditions, it simultaneously elevates the company's financial risk exposure.

Table 5. ROA PT. United Tractors Tbk Period 2019-2023:

Year	Net Profit After Tax (Rp)	Total Assets (Rp)	Return on Investment (ROA)
2019	11,312,074	111,713,375	10,13%
2020	6,003,200	99,800,963	6,02%
2021	10,279,683	112,561,356	9,13%
2022	21,005,105	140,478,220	14,95%
2023	20,611,775	154,028,248	13,37%

Source: data processed from pt. United tractors.tbk

The results of a previous analysis show the Return on Investment (ROA) of PT. United Tractors Tbk from 2019 to 2023, which measures the company's efficiency in generating profits relative to its total assets. Based on the Return on Equity (ROE) calculation for PT. United Tractors Tbk, the company's performance fluctuated between 2019 and 2023. In 2019, ROE reached 18.52%, reflecting the company's ability to generate a reasonable return on its equity. However, in 2020, there was a significant decline to 9.49%, likely influenced by global economic impacts or internal company factors that reduced net income and equity management efficiency. However, the company successfully restored its profitability with significant increases in ROE

in 2022 (23.47%) and 2023 (24.54%), indicating increased efficiency in generating net income from its equity. This increase may have been due to more stable revenue growth, more effective cost management, or increased market demand. Overall, despite the temporary decline in 2020, the company's performance demonstrated strong growth and an improved ability to maximize return on equity in recent years.

Internal Control and Operational Efficiency

The increase in ROA and ROE of PT United Tractors in 2022–2023 indicates efficiency in asset and equity utilization. However, to maintain this efficiency, the company needs to implement strong internal controls. According to Hidayah & Saptantinah (2025), integrated internal controls through an accounting information system can improve the effectiveness of online cash management and drive operational efficiency. This aligns with Ryntho (2024), who stated that a weak cash accounting control system can lead to inaccurate financial reports. Therefore, financial controls should encompass not only structural aspects such as financing, but also daily operational processes that support profit efficiency and avoid asset leakage.

Implementation of Budget Control and Investment Discipline

In the context of fluctuating solvency and profitability ratios, implementing budget control and investment discipline is a strategic step. This strategy includes strict capital budgeting and project evaluation based on NPV/IRR analysis to ensure selective investment. Furthermore, companies need to control project financing by referring to Myers' (1984) pecking order theory, which recommends that companies prioritize internal funding (retained earnings) before using debt or issuing new shares. Using profits to repay debt will improve the capital structure and reduce future financial risk. This demonstrates that discipline in financial control directly contributes to business sustainability and long-term financial performance.

Cost Control to Increase Profitability

Increasing ROA and ROE ratios must be supported by effective cost control. According to previous analysis, operating expenses are a critical factor influencing profitability performance. In this regard, implementing a cost control system through variance analysis, standard costing, and continuous monitoring is essential. As stated by Rasyiddin et al. (2023), profit is influenced not only by revenue but also by cost and tax management. Therefore, strategies such as efficient use of raw materials, controlling overhead costs, and optimizing marketing expenditures will help maintain high profit margins despite external pressures such as falling commodity prices or rising borrowing costs. This finding aligns with the research of Azzahra et al. (2024), which states that profitability can be influenced by factors beyond the funding structure, such as murabahah financing, the cash ratio, and profit sharing from third-party funds. Although some variables, such as the BOPO and cash ratio, are not always relevant to Return on Assets (ROA), improving operational efficiency remains key to driving profitability. This indicates that internal management efficiency and cost management strategies play a significant role in strengthening the company's financial performance, as reflected in the increase in ROA and ROE of PT United Tractors Tbk in 2022–2023.

Integration of Financial Risk Control for Sustainability

The integration of solvency and profitability analysis demonstrates that financial performance cannot be evaluated without considering financial risk control. The increase in ROE in 2023, for example, was not only the result of higher operational income but was also amplified by greater leverage. This situation illustrates the trade-off between risk and return: while debt financing can enhance shareholder returns in favorable conditions, it simultaneously increases

financial exposure and long-term vulnerability (Brigham & Ehrhardt, 2022; Murombi & Mohammed, 2025; Wang et al., 2018).

For United Tractors, this dynamic is particularly relevant given the volatility of global coal prices, infrastructure demand, and regulatory changes. The reliance on debt to finance fleet expansion and diversification projects in 2023 created growth opportunities but also introduced risks to liquidity and interest rate sensitivity. Evidence from the *Annual Report 2023* highlights that, alongside expansion, the company undertook cost-control measures and pursued diversification into renewable energy, signaling an attempt to balance profitability growth with risk mitigation (PT United Tractors Tbk, 2023).

From a sustainability perspective, effective financial risk control is essential to ensure that short-term gains in profitability are not achieved at the expense of long-term stability. Integrating solvency policies with profitability strategies allows the company to maintain resilience against external shocks such as economic downturns or fluctuations in commodity markets. Thus, sustainable financial performance depends not only on maximizing returns but also on aligning capital structure decisions with prudent risk management practices.

Conclusion

During 2019–2023, PT United Tractors Tbk maintained efficiency in utilizing assets and equity, as reflected in improvements in ROA and ROE alongside fluctuations in DAR and DER. The decline in debt reliance in 2020 and the subsequent increase in 2023 should be interpreted within broader contexts, including the economic impact of the COVID-19 pandemic and strategic company actions such as fleet expansion and infrastructure investments. The study's analysis is limited by its descriptive nature and absence of benchmarking against industry standards or competitors, which restricts the ability to assess whether the company's debt management is conservative, moderate, or aggressive. Additionally, solvency and profitability have been considered separately, though leverage directly affects ROE and financial risk. Overall, PT United Tractors demonstrates prudent financial management and improving profitability. However, future research should incorporate contextual explanations, comparative benchmarking, and an integrated analysis of solvency and profitability to provide a more comprehensive understanding of the factors driving financial performance.

Acknowledgment

Based on the analysis of PT United Tractors Tbk's financial ratios during the 2019–2023 period, it is recommended that the company enhance its financial analysis by incorporating more advanced approaches, including trend analysis, industry benchmarking, and comparison with competitors in the heavy equipment and mining sectors. Such an approach will provide management with a clearer understanding of the company's relative financial position and strategic standing in the market. In addition, to strengthen strategic decision-making, financial analysis should be integrated with qualitative assessments, such as evaluations of managerial policies, corporate strategy adjustments, and operational initiatives. By combining quantitative and qualitative perspectives, future analyses can provide not only numerical insights but also a comprehensive understanding of the underlying factors influencing PT United Tractors' financial performance.

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