

# A Study on Financial Leverage and its Effect on Profitability of Rane (Madras) Limited

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## ABSTRACT

This study explores the relationship between financial leverage and profitability, focusing on Rane (Madras) Limited, a leading Indian automotive components manufacturer. Financial leverage, the use of debt to enhance equity returns, can lower capital costs and potentially boost profitability, but excessive reliance on debt may increase financial risks. Using secondary data from 2019 to 2024, the study analyzes key financial metrics, including debt ratio, debt-to-equity ratio, return on assets (ROA), and return on equity (ROE).

Findings reveal a rising dependence on debt financing, with increasing leverage failing to yield consistent profitability. ROA and ROE showed significant volatility, reflecting inefficiencies in asset utilization and shareholder returns. Statistical analysis indicates no significant correlation between financial leverage and net profit, highlighting the influence of operational efficiency, cost control, and market conditions.

The study recommends reducing debt reliance, improving liquidity, and optimizing costs to achieve a balanced capital structure and enhance financial performance.

**Keywords:** Financial Leverage, Profitability

## 1. INTRODUCTION

Financial leverage significantly influences a company's capital structure and financial health by utilizing debt to enhance equity returns. While leveraging debt can reduce the overall cost of capital and boost profitability, it also introduces risks, especially during economic downturns, due to fixed financial obligations. The relationship between financial leverage and profitability remains a subject of debate. Some argue that higher leverage enhances profitability, while others highlight its potential to erode returns. A third view suggests leverage has minimal impact, with factors like operational efficiency and market conditions playing a larger role.

This study examines the financial leverage of Rane (Madras) Ltd., a leading Indian manufacturing firm, to explore its impact on profitability. Motivated by the researcher's curiosity about the company's financial structure, the study provides empirical insights into the contentious leverage-profitability relationship. Findings aim to guide corporate leaders and policymakers in optimizing capital structures for sustainable financial performance.

## OBJECTIVE

- To analyze the debt status and the profitability status of RANE (MADRAS) LIMITED.
- To evaluate the effect of debt financing on profitability in RANE (MADRAS) LIMITED.

## 2. REVIEW OF LITERATURE

- **Almustafa et al. (2023):** This study highlighted the negative impact of economic policy uncertainty (EPU) on financial leverage in U.S. firms. It found that policy uncertainty discourages debt financing, reducing profitability, emphasizing the importance of stable policy environments for leveraging.
- **Shaheen et al. (2023):** Investigating South Asian firms, this research found that optimal financial leverage positively influences profitability. However, excessive debt negatively impacts returns due to high interest costs and liquidity constraints.
- **Cheng & Wong (2023):** Analyzing Chinese technology firms, this study revealed that financial leverage enhances profitability for growth-oriented companies. However, surpassing a critical debt threshold leads to diminishing returns, indicating the need for balanced leverage.
- **Datta et al. (2021):** Focusing on Indian manufacturing firms, this research identified a U-shaped relationship between leverage and profitability. Both under-leveraging and over-leveraging reduce profitability, highlighting the importance of maintaining optimal debt levels.

## 3. RESEARCH METHODOLOGY

Research methodology refers to the systematic approach and techniques used to conduct research, analyze data, and draw conclusions. It encompasses the methods, tools, and strategies employed to collect, interpret, and present data in a structured and logical manner. Research methodology involves selecting the research design, defining the objectives, choosing the sample, and determining the data collection and analysis techniques to ensure accuracy and reliability. It serves as a framework for solving research problems and achieving the intended outcomes effectively and efficiently.

### Collection of Data

Collection of data refers to the process of gathering information, facts, or measurements from various sources to address a specific research objective or question. It involves systematically obtaining relevant data using methods such as surveys, interviews, observations, or from existing resources like reports, articles, and databases. The purpose of data collection is to ensure that the information gathered is accurate, reliable, and sufficient to analyze and draw meaningful conclusions in research or decision-making processes.

There are two types of collecting data,

- Primary Data
- Secondary Data

In this project, secondary data is utilized, drawing insights from the financial records and reports of Rane (Madras) Limited, from the official website of the company.

### SECONDARY DATA

Secondary data refers to information that has already been collected, analyzed, and published by others for a different purpose but is used in your research. It includes sources such as financial statements, annual reports, government publications, academic articles, industry reports, and online databases. Using secondary data is cost-effective and time-efficient, as it provides readily available information to support research objectives, validate findings, and enhance the analysis process. In this project, secondary data like balance sheets and Profit and loss account Statement of Rane (Madras) Limited were used to analyze the financial leverage and its effect on profitability.

#### 4. DATA ANALYSIS AND INTERPRETATION

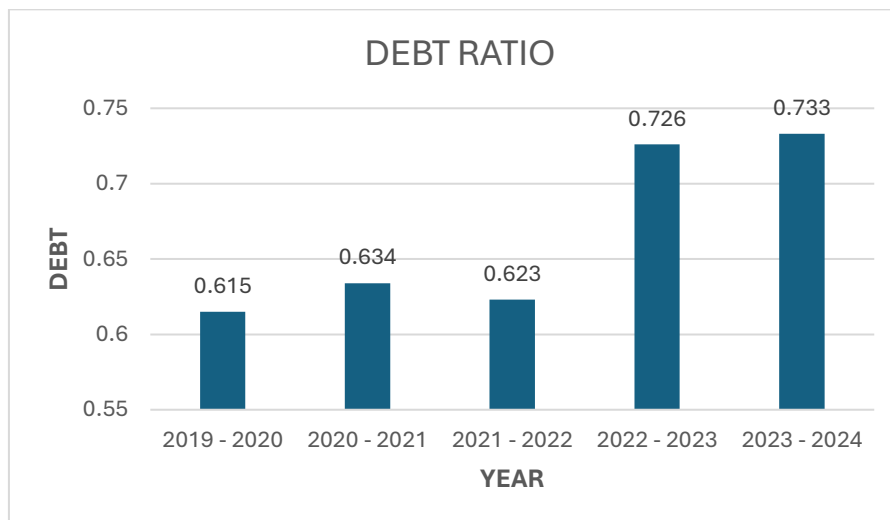
##### FINANCIAL LEVERAGE RATIO

##### DEBT RATIO

**Meaning:** The debt ratio measures the proportion of a company's total assets financed by debt. A higher ratio indicates greater financial risk.

$$\text{DEBT RATIO} = \text{TOTAL DEBT} / \text{TOTAL ASSETS}$$

Period	Total Debt (Cr.)	Total Assets (Cr.)	Debt Ratio
2019 - 2020	533.3	866.08	0.615
2020 - 2021	600.43	946.03	0.634
2021 - 2022	744.5	1193.89	0.623
2022 - 2023	855.28	1177.99	0.726
2023 - 2024	991.19	1352.15	0.733



##### INFERENCE

The trend shows an overall increase in the debt ratio over the years, particularly in the last two years. This indicates that the company has increasingly financed its operations through debt, potentially raising financial risk and impacting its long-term financial stability. Further analysis of profitability and interest coverage is recommended to assess the sustainability of this financial structure

##### PROFITABILITY RATIO

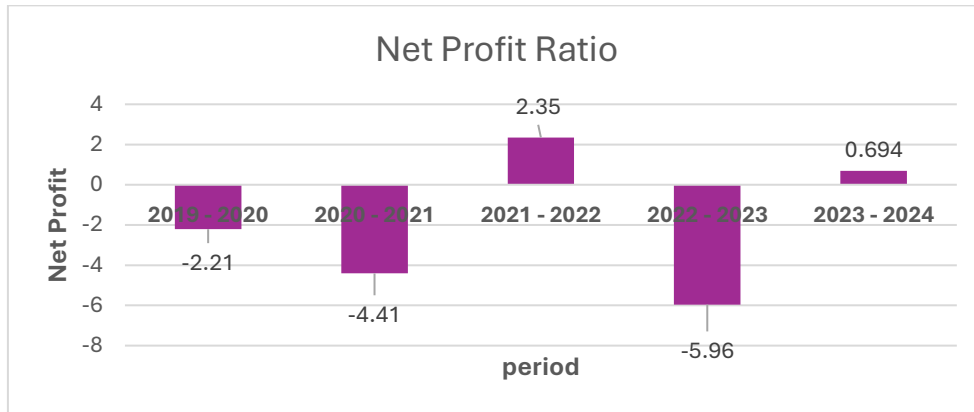
##### NET PROFIT RATIO

**Meaning:** This ratio shows the percentage of net profit earned from total sales, reflecting overall profitability.

$$\text{NET PROFIT RATIO} = \text{NET PROFIT} / \text{NET SALES} \times 100$$

Period	Net Profit (or) Net Loss (Cr.)	Net Sales (Cr.)	Net Profit Ratio (%)
2019 - 2020	(24.43)	1100.52	(2.21)
2020 - 2021	(50.69)	1147.15	(4.41)
2021 - 2022	36.61	1555.00	2.35

2022 - 2023	(126.54)	2123.55	(5.96)
2023 - 2024	14.88	2142.25	0.694



**INFERENCE**

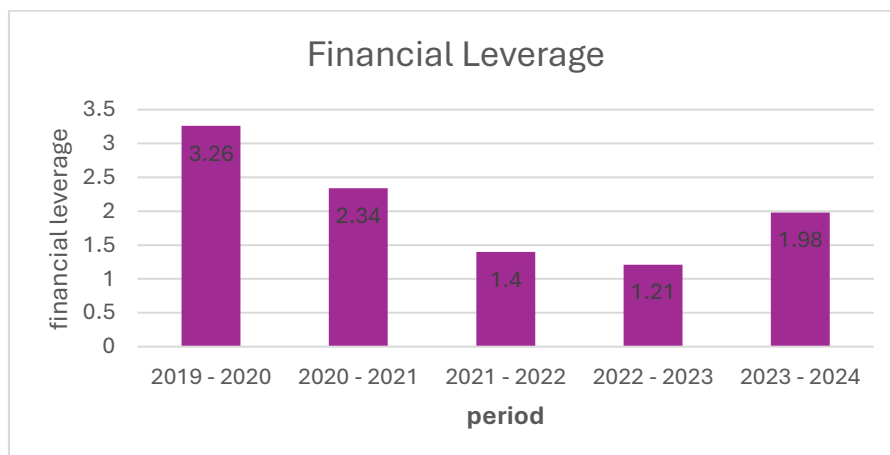
The graph displays the Net Profit Ratio of a company over the years 2019-2020 to 2023-2024. The net profit ratio has been fluctuating significantly during this period. There was a sharp decline in 2020-2021, followed by a significant increase in 2021-2022. However, the net profit ratio declined again in the following years. This indicates that the company's overall profitability has been unstable and subject to significant fluctuations.

**FINANCIAL LEVERAGE**

**Meaning:** Financial leverage refers to the use of borrowed funds to increase the potential return on investment or equity.

FINANCIAL LEVERAGE = EBIT / EBT

Period	EBIT (Cr.)	EBT (Cr.)	Financial Leverage (times)
2019 - 2020	46.08	14.13	3.26
2020 - 2021	40.92	17.46	2.34
2021 - 2022	72.52	51.47	1.40
2022 - 2023	155.42	127.78	1.21
2023 - 2024	101.67	51.26	1.98



**INFERENCE**

The graph titled "Financial Leverage" depicts a decreasing trend in financial leverage over the years 2019-2024. The leverage peaked in 2019-2020 at 3.26, then declined steadily to 1.98 in 2023-2024. This suggests a reduction in the use of debt financing during this period.

**CORRELATION AND REGRESSION**

**HYPOTHESIS:**

**Null Hypothesis (H<sub>0</sub>):** The financial leverage have no statistically significant relationship with the net profit.

**Alternative Hypothesis (H<sub>1</sub>):** The financial leverage have a statistically significant relationship with the net profit.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.057 <sup>a</sup>	.003	-.329	3.98069

a. Predictors: (Constant), Financial\_Leverage

**INFERENCE**

The regression model shows a very weak relationship between financial leverage and the dependent variable, with an R<sup>2</sup> value of 0.003, indicating that financial leverage explains only 0.3% of the variance. The negative adjusted R<sup>2</sup> suggests the model lacks predictive power and may not be a good fit for the data.

**FINDINGS**

- The company's debt ratio increased from 0.615 in 2019-2020 to 0.733 in 2023-2024, showing greater reliance on debt financing, raising financial risk concerns.
- Fluctuations were evident, with a significant drop in 2022-2023 to -5.96%, indicating unstable overall profitability.
- Decreasing from 3.26 in 2019-2020 to 1.98 in 2023-2024, the trend suggests reduced reliance on debt for financial leverage.
- Both financial leverage and debt-to-equity ratio showed negligible correlation with net profit, suggesting other factors play a more significant role in profitability.

**SUGGESTION:**

- Reduce reliance on debt financing by exploring alternative funding options like equity or retained earnings to mitigate financial risk and improve stability.
- Maintain a balanced debt-to-equity ratio by controlling debt levels and considering equity infusion to avoid excessive financial leverage
- Improve asset utilization by investing in high-return projects and disposing of underperforming or non-essential assets.
- Investigate other factors affecting net profit, such as operational efficiency, market conditions, and strategic management, to identify actionable areas for improvement.

## CONCLUSION

The research reveals that debt does not significantly influence profitability at Rane (Madras) Ltd. Instead, operating expenses and other factors such as cost management, operational efficiency, and market conditions play a more critical role in shaping profitability. The analysis underscores the need to focus on these areas for financial improvement.

### Positive Aspects:

1. Consistent gross profit ratio.
2. The company's efforts to reduce financial leverage over the years indicate a move towards sustainable financial practices.

### Negative Aspects:

1. Liquidity challenges, reflected in low current and quick ratios, highlight the need for better working capital management.
2. Volatility in net profit and returns (ROA and ROE) signals instability in overall profitability, requiring strategic interventions to stabilize financial performance.
3. Company need to improve in cost management because there is high in gross profit and decrease in operating profit it shows that high in operating expenses.

## REFERENCE:

1. Ramachandran, R., & Suri, P. (2024). The interplay of financial leverage and market stability: Evidence from the Asian energy sector. *Journal of Financial Economics and Policy*, 12(3), 215-230.
2. Zinal, A. (2024). Financial leverage and profitability: Insights from Jordanian firms. *Middle Eastern Journal of Business Studies*, 18(2), 142-157.
3. Cheng, L., & Wong, T. (2023). Financial leverage in Chinese technology firms: Growth opportunities and diminishing returns. *Asia-Pacific Journal of Corporate Finance*, 29(4), 301-317.