

A Study on Leverage Analysis in Alpha Marine Limited at Nellore

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Abstract: This study analyzes the concept of leverage and its impact on the financial performance of Alpha Marine Limited. Leverage helps a company increase returns by using fixed operating costs and borrowed funds. The study focuses on operating leverage, financial leverage, and combined leverage to understand their effect on profit and risk. Secondary data such as annual reports and financial statements are used for analysis. Various financial ratios and formulas are applied to evaluate the company's leverage position. The study helps to understand how leverage influences profitability and financial decision-making in the company.

Keywords: Operating leverage , Financial leverage , Combined leverage.

Introduction:

In the modern corporate and financial environment, business organizations operate under conditions of uncertainty, competition, and constant change. To survive and grow in such an environment, firms must make efficient financial, operating, and investment decisions. One of the most critical aspects of financial decision-making is the management of risk and return, which is closely linked to the concept of leverage. Leverage analysis is a vital tool used by financial managers, investors, and analysts to understand how changes in sales, costs, and financing patterns influence a firm's profitability and financial stability.

Leverage refers to the use of fixed costs in a firm's cost structure or financing structure to magnify returns. While leverage can increase profits when business conditions are favorable, it can also increase losses during adverse conditions. Therefore, leverage acts as a double-edged sword. Understanding leverage and its impact on earnings is essential for effective financial planning, control, and decision-making.

Review of literature:

Chen, Harford & Kamara (2018) The study found that firms with high operating leverage tend to use lower financial leverage. It highlights a trade-off between operating risk and financial risk in capital structure decisions.

Chen, Li & Li (2021) The study introduced improved measurement of operating leverage and concluded that operating leverage strongly influences earnings volatility and firm risk.

Rehman, Hysa & Mao (2020) Their empirical analysis across emerging markets revealed that financial leverage negatively affects profitability when debt levels exceed optimal limits.

Santos & Green (2022) The study concluded that combined leverage significantly amplifies business risk, making firms more sensitive to changes in sales and operating income.

Putri, Wijaya & Nugroho (2021) Their findings indicate that operating and financial leverage jointly affect firm value, but the impact varies across industries and economic conditions.

Need for the study:

Present condition of capital market is complex and unexpected where the investors require in-depth research before their rational investment decisions. Present study provides useful information to the investors for making investment decisions as leverage is influencing the long term financial performance of the firm. Under this research study financial leverage, operating leverage and combined leverage analysis and their impact on return on equity of ALPHA MARINE LIMITED. The study is useful for management, investors, lenders, and academicians for evaluating financial efficiency and decision-making.

Scope of the study:

The scope of the study is limited to the analysis of leverage position of Alpha Marine Limited based on secondary data collected from annual reports and published financial statements.

The study focuses on operating leverage, financial leverage, and combined leverage during the selected period of study. The analysis helps in understanding the cost behavior, risk exposure, and profitability position of the company.

Objectives of the study:

- To analyze the financial performance of Alpha Marine Ltd.
- To examine the Leverage analysis in Alpha Marine Ltd.
- To study the relationship between Leverage and profitability in Alpha Marine Ltd.
- To provide sustainable suggestions for improving the performance of Alpha Marine Ltd.

Research Methodology:

Research Design : Exploratory research

Data Collection

Primary data: It is collected from the managers and officials of Alpha Marine Ltd. through discussion.

Secondary data:

The secondary data is collected from the published & unpublished sources, books, Journals, websites, magazines etc.

Data Analysis Tools:

The collected data will be analyzed by using ratio's, leverage tools and statistical tools.

For examining the leverage analysis in Alpha Marine Ltd, operating leverage, financial leverage and combine leverage are calculated.

Limitations of the study

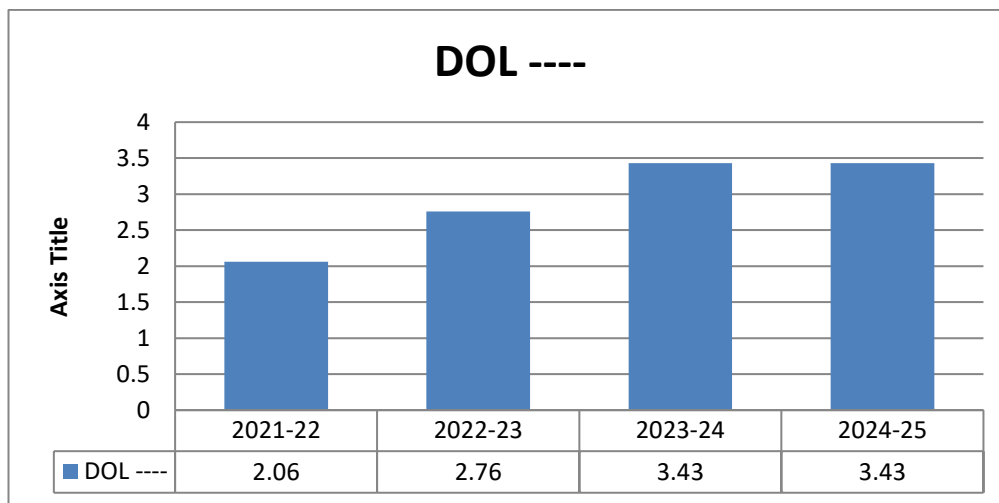
- The study is based on secondary data collected from annual reports and published financial statements of Alpha Marine Limited.
- The analysis is limited to a specific period of study, and results may vary for other time periods.
- The study focuses only on leverage analysis and does not cover other financial ratios in detail.
- Due to constraints of time cost and non-availability of data, the study was restricted to a period of 5 years.

Data Analysis & Interpretation:**Degree of Operating Leverage**

The degree of operating leverage depends upon the amount of fixed elements in the cost structure. It can be determined by means of a break even or cost volume profit analysis it can be calculated as

$$\text{DOL} = \frac{\text{Percentage change in EBIT}}{\text{Percentage change in sales}}$$

YEAR	Sales	Operation profit	%EBIT	%Sales	DOL
2020-21	770.93	57.37	----	----	----
2021-22	867.76	72.25	25.93	12.56	2.06
2022-23	989.96	102.48	78.62	28.41	2.76
2023-24	1096.21	147.3	156.75	42.19	3.43
2024-25	1258.08	181.8	216.89	63.18	3.43



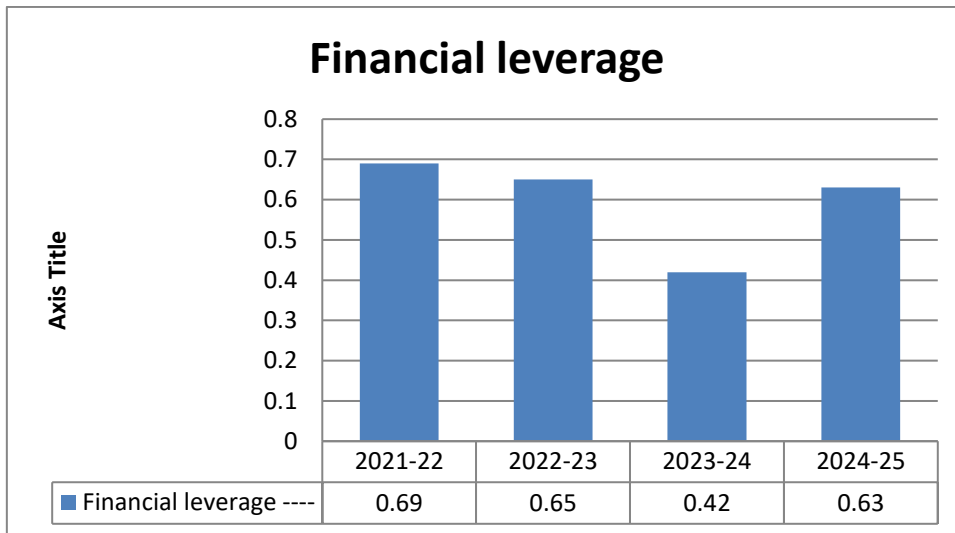
INTERPRETATION:

The table shows the Degree of Operating Leverage (DOL) of Alpha Marine Limited for the period from 2020–21 to 2024–25. Operating leverage indicates how sensitive operating profit (EBIT) is to changes in sales due to fixed operating costs. During 2021–22, sales increased by 12.56% and operating profit increased by 25.93%, resulting in a DOL of 2.06.

Degree of Financial Leverage

$$DFL = (\text{Percentage change in EPS} / \text{Percentage change in EBIT})$$

YEAR	EPS	Operation profit	%EPS	%EBIT	Financial leverage
2020-21	6.25	57.37	----	----	----
2021-22	7.38	72.25	18.08	25.93	0.69
2022-23	9.45	102.48	51.2	78.62	0.65
2023-24	10.46	147.3	67.36	156.75	0.42
2024-25	14.84	181.8	137.44	216.89	0.63



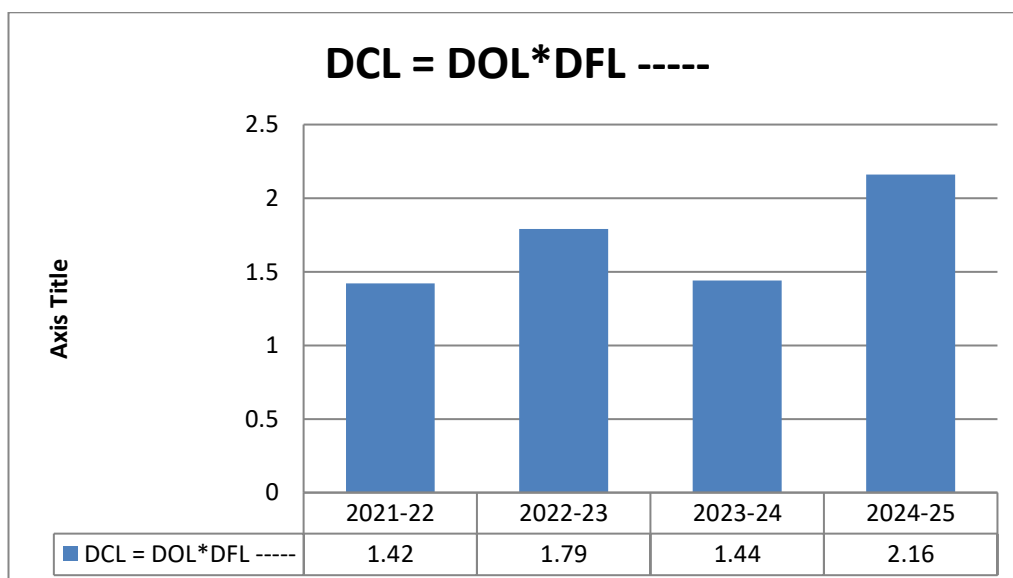
INTERPRETATION:

The financial leverage (DFL) of Alpha Marine Limited for the period from 2020–21 to 2024–25. Financial leverage measures the sensitivity of earnings per share (EPS) to changes in operating profit (EBIT) and indicates the level of financial risk arising from the use of debt. In the base year 2020–21, percentage changes and financial leverage are not calculated. During 2021–22, operating profit increased by 25.93% and EPS increased by 18.08%, resulting in a financial leverage of 0.69.

Degree of Combined Leverage

$DCL = (\text{Percentage change in EPS} / \text{Percentage change in SALES})$

Year	% change in EPS	% Change in Sales	DOL	DFL	DCL = DOL*DFL
2020-21	----	----	----	----	-----
2021-22	18.08	12.56	2.06	0.69	1.42
2022-23	51.2	28.41	2.76	0.65	1.79
2023-24	67.36	42.19	3.43	0.42	1.44
2024-25	137.44	63.18	3.43	0.63	2.16



INTERPRETATION:

The degree of combined leverage The table presents the Degree of Combined Leverage (DCL) of Alpha Marine Limited for the period from 2020–21 to 2024–25. Combined leverage shows the combined effect of operating leverage and financial leverage on earnings per share (EPS) due to changes in sales. In the base year 2020–21, combined leverage is not calculated as percentage changes are not available. During 2021–22, the DCL was 1.42, indicating that a 1% change in sales resulted in a 1.42% change in EPS.

FINDINGS

- The degree of operating leverage of the firm was in mixed trend during the study period from 2020 to 2025. The average of leverage ratio maintained by 2.92. Therefore, it is observed that the firm is not maintaining optimum operating leverage. A low level to moderate operating leverage is good for the firm.
- The financial leverage of the firm was in mixed trend during the study period from 2020 to 2025. Therefore, it is observed that the firm is not maintaining optimum financial leverage.
- The degree of combined leverage of the firm was in mixed trend during the study period from 2020 to 2025. The average degree of combined leverage maintained by 1.70. Therefore; it is observed that the firm is not maintaining optimum level of combined leverage.

SUGGESTIONS

- It is suggested to the firm to maintain low level operating leverage to moderate level of operating leverage which optimizes the percentage increase in sales than the percentage increase in the EBIT.
- It is suggested to the firm to maintain moderate level of financial leverage which optimizes high percentage in EPS than the percentage change in EBIT.
- The average degree of combined leverage maintained by 2.16. It is suggested to the firm to maintain moderate combined leverage which optimizes high percentage increase in sales than the percentage increase in EPS.
- It is suggested to the firm to maintain sufficient liquidity level so that there should be trade-off between profitability and liquidity and it can discharge short term obligations effectively.

CONCLUSION

The study of leverage analysis reveals that the use of operating and financial leverage plays a significant role in determining the profitability and risk position of the company. The analysis shows that operating leverage has a direct impact on operating profit, indicating that changes in sales significantly influence earnings before interest and tax. Financial leverage reflects the extent of debt financing used by the company and its effect on net profit. The combined leverage analysis indicates that the company's overall risk is influenced by both operating and financial leverage.

REFERENCES

- Pandey, I.M. (2021). Financial Management- 12th Edition New Delhi: Vikas Publishing.
- S A. Siddiqui (2005) Managerial Economics and Financial Analysis-2nd Edition, New Delhi, New Age International (p) Ltd, Publishers.
- Prasanna Chandra (2019) Financial Management and Analysis-10th Edition, McGraw Hill Education, India.
- <https://www.alphamarinelimited.in>
- www.google.com
- www.wikipedia.com