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ANALYSIS OF FINANCIAL LEVERAGE ON PROFITABILITY AND RISK

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ABSTRACT

This study presents an empirical insight into the relationship between return on equity (roe), financial leverage and size of firms in the restaurant industry for the period 1998 to 2003 using ols regressions. Research results suggest that at least during the test period firm size had a more dominant effect on roe of restaurant firms than debt use, larger firms earning significantly higher equity returns. Results also suggest that regardless of having lower financial leverage, smaller restaurant firms were significantly more risky than larger firms. As such, the dominance of size effect in the roe-financial leverage relationship within the restaurant industry is better understood.

INTRODUCTION

Finance is defined as the provision of money at the time when it is required. Every enterprise, whether big, medium or small, needs finance to carry on its operations and to achieve its targets. In fact, finance is so indispensable today that it is rightly said to be the life blood of an enterprise. Without adequate finance no enterprise can possibly accomplish itsobjectives. Finance refers to the management of flows of money through an organization. It concerns with the application of skills in the manipulation, useand control of money. Right from the promotional stage up to end, finance plays an important role in a company's life. It is necessary that correct estimate of the current and future need of capital be made to have an optimumcapital structure which shall help the organization to run its work smoothly and without any stress.

Financial leverage is a measure of how much firms use equity anddebt to finance its assets. A company can finance its investments by debt andequity. The company may also use preference capital. The rate of interest on debt is fixed irrespective of the company's rate of return on assets. The financial leverage employed by a company is intended to earn more on the fixed charges funds than their costs. As debt increases, financial leverage increases. The financial leverage employed by a company is intended to earnmore on the fixed charges funds than their costs.

Profit is an essential indicator to measure the performance of a firm. The ability to make profits depends on the capacity and activity of a business. Capacity refers to the competence of a management to procure funds from theright source at right time to finance the assets, whereas, activity measures theefficiency of a firm in the utilization of the assets in enhancing its earning capacity. The profit earning companies can easily add more debt in their capital structure. Hence the profitability plays an essential role in leverage decisions.

Here, an attempt is made to study the leverage analysis and profitability of selected companies in india during the periods from 2022 to 2023. Financing the firm's assets is a very crucial problem in every business and as a general rule there should be a proper mix of debt and equity capital in financing the firm's assets. The use of long term fixed interest bearing debtand preference share capital along with the equity shares is called financial leverage or trading on equity. The long term fixed interest bearing debt is employed by a firm to earn more from the use of these sources than their costso as to increase the return on owner's equity. Leverage means use of funds or employment of assets in the capital structure of the firm for which the firmhas to pay fixed cost or fixed return. Employment of such funds will help thefirm to increase the profitability. The leverage of a firm is essentially related to a profit measure, which may be a return on investment or on earnings before taxes. A proper combination of both operating leverage and financial leveragecontributes to the growth of the company, while an improper combination of leverage restricts the growth of the company.

Scope and significance of the study

An investor who would like to rational and scientific in his investment activity has to evaluate a lot of information about past performance and future performance of the companies, industries and the economy as a whole before taking the investment decision and hence, the present study attempts to analyse the effect of leverage on financial performance of selectedengineering work companies in india.

RESEARCH DESIGN

Research design indicates the method and produce of conducting research study. In pursuance of objectives stated above, the following research design is used for conducting the study.

LIMITATIONS OF THE STUDY

The information that has been used is primarily from historical annual reports available to the public and the same doesn't indicate the current situation of the company. Detailed analysis could not be carried out for the research work because of the limited time span. Since the financial matters aresensitive in nature, the same could not be obtained easily. The tool that has been used is limited to correlation.

REVIEW OF LITERATURE

Conceptual review

Leverage means use of funds or employment of assets in the capital structure of the firm for which the firm has to pay fixed cost or fixed return. Employment of such funds will help the firm to increase the profitability. Thehigher leverage obviously implies higher outside borrowings and hence it is riskier if the firms earning capacity is reduced. In other words, only when thereturn on investment (roi) is higher than the cost of outside borrowing, theeffect of leverage will be favourable. In other words, the leverage effect will be favourable for the firm if it is able to earn higher rate of return than the rateof interest on the amount borrowed.

There are three types of leverages. They are operating leverage, financial leverage and combined leverage. The leverage associated with the employment of fixed cost assets is referred to as operating leverage while theleverage resulting from the use of fixed cost/return source of funds is known as financial leverage. In addition to these two kinds of leverages, one could always compute 'composite leverage' to determine the combined effect of theleverage. In the present days, the term leverage is also used in relation to working capital so as to measure the sensitivity of return on investment to changes in the level of current assets.

Impact of financial leverage

The financial leverage is used to magnify the shareholder's earnings.It is based on the assumption that the fixed charges /costs funds can be obtained at a cost lower than the firm's rate of return on its assets. When the difference between the earnings from assets financed by fixed cost funds andthe costs of these funds are distributed to the equity stockholders, they will get additional earnings without increasing their own investment. Consequently, the earnings per share and the rate of return on equity share capital will go up.On the contrary, if the firm acquires fixed cost funds at a higher cost than the earnings from those assets then the earnings per share and return on equity capital will decrease. The impact of financial leverage can be analyzed whilelooking at earnings per share and return on equity capital.

Significance of financial leverage

Financial leverage is employed to plan the ratio between debt and equity so that earning per share is improved. Following is the significance offinancial leverage:

- **Planning of capital structure:** the capital structure is concerned with the raising of long-term funds, both from shareholders and long-term creditors. A financial manager has to decide about the ratio between fixedcost funds and equity share capital. The effects of borrowing on cost of capital and financial risk have to be discussed before selecting a final capital structure.
- **Profit planning:** the earning per share is affected by the degree of financial leverage. If the profitability of the concern is increasing then fixed cost funds will help in increasing the availability of profits for equitystockholders. Therefore, financial leverage is important for profit planning. The level of sales and resultant profitability is helpful in profit
Planning. An important tool of profit planning is break-even analysis. The concept of break-even analysis is used to understand financial leverage.

So, financial leverage is very important for profit planning.

Empirical literature

The literature review is the effective evaluation of selected documents on a research topic. The following literature reviews are collectedbased on the topic.

Subramanyam, (2018) studied impact of financial leverage on firm's profitability of coromandel packaging limited. It is examined for the period of 1985-86 to 2013-14. The result of regression indicates that the coefficient of dol, dfl and dtl is positive with roce but not significant. However, theoverall model is statistically significant; the coefficient of dol, dfl and dtl is positive with roe but not significant. It was concluded that coromandel packaging limited has satisfactory level of operating leverage andcombined leverage.

Joji abey, (2018) studied determinants of profitability in indian engineering work sector. The sample contains 23 companies selected on the basis of purposive
Sampling. The period of the study consists of 9 years. The collected data is analyzed by making use of correlation and multiple regression. The result revealed that there exist relationship between age, expenses to income ratio and assets turnover ratio on profitability. The result showed a negative correlation between leverage and profitability.

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of the data collected for thestudy. The objectives are to find out three types of leverages and to study theimpact on profitability. Here, the average ratio is taken as standard ratio for analysing the risk of selected companies.

Table4.1

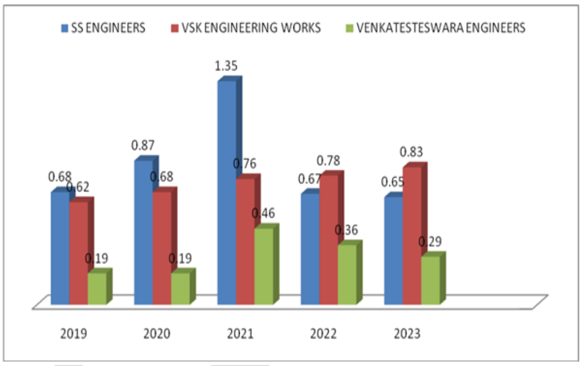
Current Ratio

(Rs. In crores)

Year	SS ENGINEERS	VSK ENGINEERING WORKS	VENKATESTESWARA ENGINEERS
2019	0.68	0.62	0.19
2020	0.87	0.68	0.19
2021	1.35	0.76	0.46
2022	0.67	0.78	0.36
2023	0.65	0.83	0.29
Average	0.84	0.73	0.29

Source: Compiled from Annual Reports

Figure 4.1
Current Ratio



The above table shows that, the current ratio of selected three companies. Current ratio depicts the short term liquidity of the firm. The average currentratio of ss engineers is 0.84. The current ratio is highest in the year 2018 (1.35) when compared with average. The ratio is lowest in the year 2023 (0.65). As the year passed, the company has reduced its short term liquidity.

In case of vsk engineering works, the average ratio is 0.73. The company has highest current ratio in the year 2023 (0.83) when compared with average ratio. The ratio is lowest in the year 2022 (0.62). The company maintains a satisfactory short term financial position.

Venkatesteswara engineers has the lowest average of 0.29 when compared with other three companies. It has a ratio of 0.19 in the year 2022. The ratio increase after twoyears. There is a slight decrease in the year 2022 and 2023 the ratio became 0.29.

Table 4.2

Quick Ratio

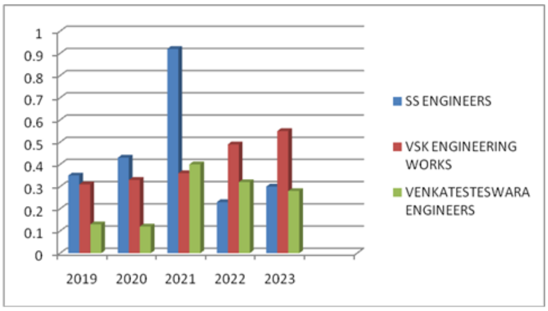
(Rs. In cores)

Year	SS ENGINEERS	VSK ENGINEERING WORKS	VENKATESTESWARA ENGINEERS
2019	0.35	0.31	0.13
2020	0.43	0.33	0.12
2021	0.92	0.36	0.40
2022	0.23	0.49	0.32
2023	0.30	0.55	0.28
Average	0.45	0.41	0.25

Source: Compiled from Annual Reports

Figure 4.2

Quick Ratio



Here, the table shows quick ratio of selected companies. This ratio measures the ability of the firm to meet its shot term liabilities. The average quick ratio of ss engineers is 0.45. The firm has higher short term liquidity in the year 2018. There was a decrease in the next years. Ss engineers has the highest quick ratio compared with the other three companies.

In the case of vsk engineering works, the average ratio is 0.41. The firm has higher short term liquidity in the year 2023. The lowest quick ratio of vsk engineering works is in the year 2022 and there is an increasing trend in the years.

In case of venkatesteswara engineers, the average ratio is 0.25. When compared with other three companies venkatesteswara engineers has the lowest quick ratio. In the year 2018, the quick ratio is higher compared to other years.

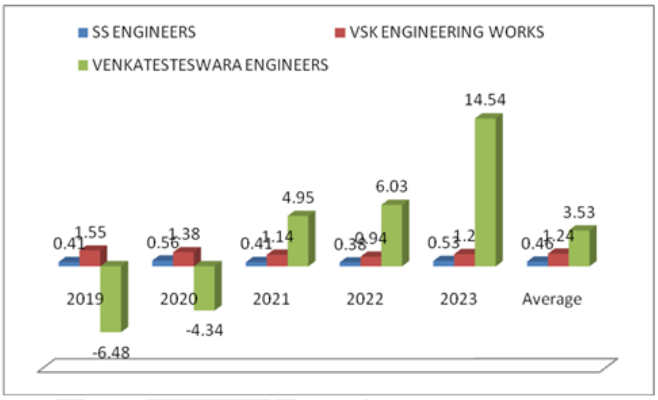
Table 4.3

Total Debt Equity Ratio

Year	SS ENGINEERS	VSK ENGINEERING WORKS	VENKATESTESWARA ENGINEERS
2019	0.41	1.55	-6.48
2020	0.56	1.38	-4.34
2021	0.41	1.14	4.95
2022	0.38	0.94	6.03
2023	0.53	1.20	14.54
Average	0.46	1.24	3.53

Source: Compiled from Annual Reports

Figure 4.3 Debt Equity Ratio



The above table shows that, the debt equity ratio of three selected companies. The average ratio of ss engineers is 0.46. In 2020, the financial risk is at maximum (0.56) in compared with average ratio. While in the year 2023 the risk has raise to 0.53. This means that company has increase its financial risk.

In the case of vsk engineering works, the average ratio is 1.24. As per the table 4.3 shows that, in 2022 the financial risk is at its maximum compared with the average ratio. While in the year 2022 the risk has lowered to 0.94.

The above table indicates that the average debt equity ratio of venkatesteswara engineers (3.53) ishigher than that of ss engineers and vsk engineering works. The highest debt equity ratio (14.54) is in2023. It shows that the financial risk of venkatesteswara engineers is more while comparing with other two companies.

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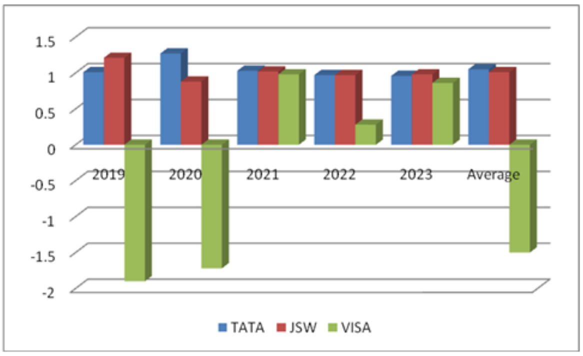
Table 4.4

Operating Leverage

years	TATA	JSW	VISA
2019	1.01	1.21	-1.9
2020	1.27	0.88	-1.72
2021	1.03	1.02	0.98
2022	0.97	0.97	0.28
2023	0.96	0.98	0.86
Average	1.05	1.01	-1.5

Source: Compiled from Annual Reports

Figure 4.4 Operating Leverage



The above table shows the operating leverage of the selected companies.It is the ratio between contribution and ebit. In case of ss engineers, the operatingleverage is1.01 in the year 2022. The average ratio is 1.05.

The average ratio of vsk engineering works is 1.01. In the year 2022, the operating leverage is 1.21. In 2020 it becomes 0.88. Is almost shows a constant trend. In 2023 it become 0.98.

In the case of venkatesteswara engineers, the average ratio is -1.5. In 2022, the leverage is -1.9 and in 2023 it becomes 0.86.

FINDINGS, SUGGESTIONS AND CONCLUSION

This chapter deals with findings, suggestions and conclusion in sympathizewith this project.

FINDINGS

- Debt equity ratio of ss engineers and vsk engineering works shows a moderate trend. The companies as low debt equity compares with venkatesteswara engineers. Venkatesteswara engineers has more financial risk when compared with other two firms.

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- The average current ratio of ss engineers is more in compared with other two firm. It shows that ss engineers has high short term liquidity in thepast five years. While venkatesteswara engineers has low short term liquidity.
- The quick ratio of vsk engineering works in the year 2023 is higher in comparing with ss engineers and venkatesteswara engineers, that shows vsk engineering works has high ability to meet its short term fund in compared with other two firm
- Correlation between operating leverage and eps shows high positive correlation in the case of venkatesteswara engineers. And shows negative correlation in the case of ss engineers and vsk engineering works.
- Correlation between financial leverage and eps shows high positive correlation in the case of vsk engineering works and venkatesteswara engineers. And show negative correlation in the case of ss engineers.
- Correlation between combined leverage and eps shows high positive correlation in the case of vsk engineering works. And shows high negative correlation incase of ss engineers and negative in case of venkatesteswara engineers.

SUGGESTIONS

- In the case of ss engineers, it is found that is high operating risk, in orderto reduce the risk, it is suggested that ss engineers employs greater amount of variables cost and smaller amount of fixed cost become low operating leverage will give cushion to the management by providing high margin of safety against fluctuations in sales.
- Since there is a negative correlation between the operating leverage and eps of ss engineers and vsk engineering works, it is suggested that the firm use low operating leverage in order to increase the eps of the firms.
- In case of financial leverage, vsk engineering works has highest fl. In order to reduce the risk, proper planning of capital structure is needed. It is suggested that they must increase the equity capital and reduce long term borrowing in the capital structure of the firm.
- Since there is negative correlation between financial leverage and eps ofss engineers and vsk engineering works, in order to increase eps, the firm should employ low financial leverage.

CONCLUSION

The study has been conducted to analyses the impact of leverage on profitability i.e. Eps of selected three companies. Leverage is an important factor which is having an impact on profitability of the firm which in turn affects the wealth of the shareholders. From this study it is found that there is a negative correlation between ol and eps, fl and eps, cl and eps of ss engineers and vsk engineering works. The result shows that the use of debt and fixed costexpenses would reduce the profitability of the firms. It implies that in orderto increase the earnings the firms need to reduce the use of debt in the capitalstructure and fixed cost in operations of the firms. And there is a positive correlation between ol and eps, fl and eps, cl and eps of venkatesteswara engineers.It implies that the use of debt and fixed cost expenses increases the profitability of the firm.

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REFERENCE

Books

- Khan m y and jain p k 'financial management' (5th edition), ss engineers mc graw hill publishing house limited.
- Pandey i m 'financial management' (10th edition), vikas publications.
- Shashi k gupta and anju gupta, 'financial management', kalyani publishers.
- Sharma r k and shashi k gupta, 'management accounting principles and practice', kalyani publishers.

Journals

- Subramanyam, d. (2018). Impact of financial leverage on firm's profitability: an investigation from coromandel packaging limited of A.p. International journal of scientific research and review , 7(1), 140 to 146.
- Joji abey, r. V. (2018). Determinants of profitability in indian engineering work industry. International journal of pure and applied mathematics, 119 (12), 15301-15313.
- Gautam sen, r. R. (2018). Rapport between leverage and profitability: a study of tvs motor company. Journal of finance and accounting, 6 (2), 49- 55.
- Olang, m. (2020). Effect of financial leverage on profitability of firms listed in the nairobi securities exchange. International journal of science and research , 6 (7), 290 to 295.
- Bhagyalakshmi, d. (2022). Leverage analysis in select cement Companies. Paripex- indian journal of research, 5 (3), 97-98.

Websites

- www.wikipedia.com
- www.investopedia.com
- www.moneycontrol.com