The Impact of Financial Leverage on Firm's Profitability

*Krithi Rajendran**

ABSTRACT

Risks and returns are two key considerations while firms make decision. Since economic environment is becoming more open, the diversity of finance is promoted; therefore, the studies on the impact of leverages on firm operation and corresponding solutions are significant. There have been several researches focusing on this topic to find out the relationship between financial leverage and firm performance. Finance is a body of principle and theories, which deals with the raising, and acquiring of funds on reasonable terms and use of money by the acquirer

Keywords: *Financial leverage; Firms' profitability; Firm performance; Operating leverage.*

1.0 Introduction

The indispensable intention to carry out a research is to acquire knowledge. Information is the base for knowledge. The preparation of a research report is the end result of a study. The project is based on the study of financial leverage and the work was carried at "The Western India Plywoods Ltd"- Kannur. The work provided the researcher, an opportunity to understand the financial strength and weakness, EBIT, EPS, etc.

Finance is a body of principle and theories, which deals with the raising, and acquiring of funds on reasonable terms and use of money by the acquirer.

In the money oriented economy, finance is one of the basic foundations of all kinds of economic activities. It is a master key, which provides access to all the sources for being employed in manufacturing and merchandising activities. It is rightly said that, "business needs money to make more money". Efficient management of every business enterprise is closely linked with efficient management of finance. Hence, a well-knit financial system directly contributes to the growth of the economy. This project report gives an overview of the analysis of financial leverage.

1.1 Leverages

Leverage is used to describe the firm's ability to use the fixed cost asset or magnify to the returns to its owner. A high degree of leverage implies that there will be a large change in profit due to a relatively small change in sales and vice versa. So higher the leverage higher the risk and higher is the expected return.

**Research Scholar, Department of Management, Nehru College of Management, Coimbatore, India (E-mail: krithi.sree89@gmail.com)*

James Horne has defined leverage as " the employment of an asset or funds for which the firm pays a fixed cost or fixed return otherwise we can say how one variable affects the other variable". The firm is not required to pay fixed return, there will be no leverages.

Leverage refers to the relationship between two inter related variables, with reference to business firm; these variables may be cost output, sales and revenue earnings before interest and taxes, EPS etc.

Leverages can be divided into the following category:

- Operating leverage
- Financial leverage
- Combined leverage

2.0 Objective of the Study

- To examine the pattern of operating, financial and combined leverage and its impact on the overall profitability of WIP ltd.
- To find out those factors affecting profitability in order to increase profit.

2.1 Limitations of the study

Every study has got its own limitations towards it. Though I tried to come out of limitation it persisted. Some of the limitations during the study;

- As the figures are taken from the balance sheet and the profit and loss account, the decision made is restricted to the figures mentioned in the report or the data gathered.
- Financial management is a critical and vital area in the administration of the company. But one cannot get all information some facts are kept secret.

It does not look into areas such as marketing performance, investment decisions, and purchasing decisions

3.0 Literature Review

A lot of research has already been conducted on the impact of financial leverage on firm profitability. Titman & Wassels (1988) concluded in his study that firms which use their earnings instead of taking outside capital earn more profit because of less leverage as compare to the firms which rely more on outside capital which increase their leverage. Firm performance can be depicted by the price of its stock. If stock price of the firm is high than firms prefer to issue equity instead of taking outside capital that helps them to maintain their leverage. Wald (1999) in his research study argued that debt to assets ratio has significant negative relation with the firm profitability. He did his study on the firm's capital structure which operates in United State, United Kingdom, Japan, France, and Germany. He used firm size, growth and firm's riskiness as explanatory variables.

According to Sheel (1994) in his study also supported the negative relation between debt to assets ratio and firms past profitability. He used cross sectional regression analysis to study the leverage behavior of 32 firms in two industry groups, Hotel industry and manufacturing sector was examined. His findings confirmed that all leverage determinants except firm size are significant in explaining leverage variations in debt behavior. Eunju & Soocheong (2005) studied the relationship between profitability, financial leverage and size of the firm in restaurant industry. He took study period from 1998 to 2003 by using ordinary least square method. The aim of this study was to analyze the association between financial leverage and restaurants firm profitability and risk. For the sake of the achievement of objective of this study, he made three hypotheses. The first hypothesis was restaurant firms using a lower level of financial leverage have higher profitability. If a restaurant firm has a higher level of financial leverage than it has to spend large amount as interest expense despite the business situation. Second hypothesis was; firms with a higher level of financial leverage are riskier than those with a lower level of financial leverage. In his study he applied return on equity as a measure of profitability and financial leverage as a ratio of long term debt to total assets and total assets as firm size. Results of the study suggested that the restaurant firms having large assets were more profitable than small firms and the sign of financial leverage variable was negative which indicated that firms with higher debt rates were less profitable.

Mangalam & Govindasamy (2010) analyzed and understand the impact of leverage on the profitability of the firm by investigating the relationship between the leverage and the earning per share. He analyzed leverage in three ways which were financial leverage, operating leverage and combine leverage. For analysis purpose he took seven public limited companies listed on the Bombay stock exchange. These were ACC Cement, Chettinad Cement, India Cements, Dalmia Cement, Ambuja Cement, Birla Cement and Prism Cement. He took the period of seven years for analysis. He used Analysis of Variance (ANOVA) as analysis tool in his study. He evaluates the hypothesis of relationship between degree of financial leverage and earnings per share. Operating leverage is caused due to fixed operating expenses in a firm. It is the firm's ability to use fixed operating costs to magnify the effects of changes in sales on its earnings before interest and taxes. Financial leverage is caused due to fixed financial costs in firm. It is the ability of the firm to use fixed financial charges to magnify the effects of change in EBIT on the earning per share. It involves the use of funds obtained at a fixed cost in the hope of increasing the return to the shareholders. The financial leverage employed by the company is intended to earn more return on fixed charge funds than their costs. There is a close relation exists between the financial leverage and earnings per share of the company. If degree of financial leverage is high and the return on investment is greater than the cost of debt capital, then the impact of leverage on EPS will be favorable. The impact of financial leverage is unfavorable when the earning capacity of the firm is less than what is expected by the lender. The results suggest that there is a significant negative relationship exists between financial leverage and earnings per share. The leverage effect is positive when the earnings of the firm are higher than the fixed charges to be paid for the lenders. The leverage is an important factor which is having impact on the profitability of the firm and the wealth of the shareholders can be maximized when the firm is able to employ more debt.

4.0 Research Methodology

The quality of the project work depends on the methodology adopted for the study. Methodology, in turn, depends on the nature of the project work. The use of project methodology is an essential part of any research. In order to conduct the study scientifically, suitable methods & measures are to be followed.

4.1 Research design

The type of research used for the collection & analysis of the data is "Historical Research Method".

The main source of data for this study is the past records prepared by the firm. The data regarding firm history & profile are collected through the study of secondary sources and discussions with individuals.

4.2 Profitability ratios

The primary objective of a business undertaking is to earn profits. Profit earning is considered essential for the survival of the business. Generally, profitability ratios are calculated either in relation to sales or in relation to investments.

4.3 Gross profit ratio

Gross profit ratio also known as gross margin. Gross profit is the result of the relationship between prices, sales volume and costs. The formula for computing gross profit ratio is as follows:

Gross Profit Ratio = Gross Profit/Sales*100

Table 1: Profit to Net Sales Ratio

Gross Profit (Rs in '000)	Net Sales (Rs in '000)	Ratio
195043	290753	67
430439	637186	68
506945	754202	67
566987	877470	64
598236	843842	71

Sources: Company's annual report

4.4 Interpretations

In the beginning the gross profit ratio was 67 percentage and it decreased to 64 percentage. It is because of the increase in the cost of goods without corresponding increase in the sales.

4.5 Operating leverage

Operating leverage means the tendency of the operating profit to vary disproportionately with sales. A firm have high degree of operating leverages it employs a greater amount of fixed cost and a smaller amount of variable cost and vice versa. If there is high degree of operating leverage a small change in sales will have a large effect of operating profit.

Table 2: Operating Leverage

Contribution	Operating Profit	Operating Leverage
71014	23065	3.07
155905	72722	2.14
198391	101951	1.94
248641	134969	1.84
248027	144974	1.71

Sources: Company's annual report

4.6 Interpretations

In the financial year the ratio of operating leverage is declining.

4.7 Financial leverage

It is tendency of the net residential income to vary disproportionately with operating profit. It shows the change that takes place in the taxable income as a result of change in the operating income. It signifies the existence of fixed interest or fixed dividend bearing securities in the total capital structure of the company.

Table 3: Financial Leverage = Operating Profit/ PBT

Operating Profit	PBT	Financial Leverage
23065	2270	10.16
72722	14831	4.90
101951	46285	2.20
134969	90238	1.49
144974	101152	1.43

Sources: Company's annual report

4.8 Interpretations

In the financial year the ratio of financial leverage is declining from.

4.9 Combined leverage

Operating leverage measures the percentage change in the operating profit due to percentage changes in sales. Financial leverage measures the percentage change in taxable profit on amount of percentage in operating profit. The combined leverage shows the effect of change in sales over taxable profit.

Table 4: Combined Leverage = Operating Leverage* Financial Leverage

Contributions	PBT	Combined leverage
71014	2270	31.28
155905	14831	10.51
198391	46285	4.28
248641	90238	2.75
248027	101152	2.45

Sources: Company's annual report

4.10 Interpretations

In the ratio of financial leverage is declining.

5.0 Conclusions

The WIP Ltd., achieved 100% utilization of raw materials due to its integrated production system. Therefore, it would be apt to call WIP Ltd., a company with a conscience'. WIP Ltd. stands for superior product performance and provides value for money to its customers. It is backed by WIP's commitment to harness the latest technology in wood processing industry and continuously upgrade its processes and machinery. Due to the high quality maintained, the company has found a ready market both India and abroad. The company does not aim at competing with the local manufactures but wants a main player in the plywood export.

In this competitive market the firm is showing a good performance. This firm has maintained its solvency in majority period. Inventory or stock is a main part of current asset. Closing stock is not a liquid or quick asset. Therefore the firm should try to reduce the stock. The management of stock level is a very tedious work. All the financial ratios of the firm (liquidity ratios, activity ratios and profitability ratios) shows good increasing trend.

References

Chandra, P. (). Financial management theory and practice. Forth edition, Tata McGraw Hill Company.

Mangalam, S. C. & Govindasamy, P. (2010). Leverage: an analysis and its impact on profitability with reference to selected cement companies in India. *Journal of Economics, Finance and Administrative Science, 27*, 50-75.

Murphy, J. E. (1968). Effect of leverage on profitability, growth and market valuation of common stock. *Financial Analyst Journal, 24*, 121-123.

Panday, I. M. ( ). *Financial Management*. 8th edition Vikas Publishing House.

Sheel, A. (1994). Determinants of capital structure choice and empirics on leverage behavior: A comparative analysis of hotel and manufacturing firms. *Hospitality Research Journal, 17*, 3-16

Titman, S. & Wessles, R. (1988). The determinants of capital structure choice. *Journal of Finance, 43*, 1-19.

Wald, J. K. (1999). How firm characteristics affect capital structure: an international comparison. *Journal of Finance Research, 22*, 161-18

Yoon, E. & Jang, S. (2005). The effect of financial leverage on profitability and risk of restaurant firms. *The Journal of Hospitality Financial Managements, 13*, 200-210.