IMPACT OF FINANCIAL LEVERAGE ON FIRMS'PROFITABILITY: AN INVESTIGATION FROM COROMANDEL PACKAGING Limited OF A.P

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Abstract: *This research is an attempt to establish a stochastic relationship between Financial leverage and Profitability of Coromandel packaging Limited. (Pulivendula Polymers Private Limited). The present study examines the relationship between return on capital employed (ROCE), return on equity (ROE), return on assets(ROE) and earnings per share(EPS) with operating leverage, financial leverage and total leverage. A data of Coromandel packaging Limited. is examined for the period 1985-86 to 2013-14. The empirical findings the result of regression indicates that the coefficient of DOL, DFL and DTL is positive with ROCE but not significant. However, the overall model is statistically significant; the coefficient of DOL, DFL and DTL is positive with ROE but not significant. However, the overall model is statistically significant, the coefficient of DOL and ROA is significant positive, coefficient of DFL and ROA is negative and coefficient of DTL and ROA is positive but not significant. However, the overall model is statistically significant and the coefficient of DOL, DFL and DTL is positive with EPS but not significant. However, the overall model is statistically significant. A data of Coromandel packaging Limited The result is concluded that Coromandel packaging Limited has use the operating leverage, financial leverage and total leverage adequately.*

Keywords: **Firms' profitability, Degree of financial leverage, Degree of operating leverage, Earnings per share, return on assets, return on capital employed, Return on equity.**

INTRODUCTION

The analysis of financial leverage on profit profiles of firms occupy a substantial portion of financial literature (Dean 1968, Sheel 1994 and Barthwal, 2000). This arises because of two main reasons: the importance of profitability as an index for assessing business efficiency and controversy surrounding the relationship between financial leverage and profitability. Capital structure of a firm is defined by its leverage; that is a mix of debt and equity financing which is subject to different financial difficulties. Financial leverage represents the total debt reported to the equity of a firm, reflecting the capacity of the firms to attract external financial resources in order to improve the efficiency of the equity. Leverage has been conceived also as a modality by which a firm can increase its growth opportunity. So, Leverage decision is fundamental for any business organization because of the need to maximize return to the various stake holders and also because of the fact that such decision has great impact on the firms' ability to deal with competitive environment. Leverage had incorporated also the meaning of the risk increasing philosophy. It is important for business that how to choose the combination of debt and equity to achieve optimum capital structure that would minimize the firm's cost of capital and improves return to owners of the business. One of the best ways in which firm increases its profit is through financial leverage. Financial leverage uses debt instruments so that the anticipated level return on the firm's equity would increase.

Although, most existing studies concentrate on developed countries not many studies have focused on developing countries like INDIA. Specifically, no known study has examined the issue in A P. This paper addresses this gap. This paper seeks to analyze the profit profile of firms in Andhra Pradesh. and to examine the impact of financial leverage on profitability using panel data.

LITERATURE REVIEW

A lot of research has already been conducted on the impact of financial leverage on firm profitability. A study by Abor (2005) reported a significantly positive relationship between total debt and total assets and profitability measured as return on equity. In the same way, Chandrakumarmangalam and Govindasamy (2010) found that leverage is positively related to profitability and shareholder's wealth are maximized when firms are able to employ more debt. In the view of Berkivitch and Israel (1996), a firm's debt's level and value is positively related when shareholders have total control over the firm's business and it is negatively related when debt holders have the power to influence the course of the business. Hence, the impact of debt on firm value is a function of the balance of power within a firm. In a situation where debt holders have more power, a negative leverage would obtain. The reverse is however the case where shareholders have more power. Dabasish Sur, Joydeep Biswas and Prasenjit Ganguly (2001) studied the Liquidity Management in Indian Private Sector Enterprises ~ A Case Study of Indian Primary Aluminum Industry. The data of HINDALCO and JINDAL for the period 1989-90 to 1996-97 used in this study have been taken from the Stock Exchange Official Directory of the Mumbai Stock Exchange. From the analysis, it may be summarized that the overall performance regarding liquidity management at JINDAL was better in terms of efficient utilization of short term funds, when as HINDALCO was unable to do so. A very high degree of positive correlation between liquidity and profitability in case of both the companies was a notable feature, reflecting the favorable effect of liquidity on profitability. Debases Rei and Debasish Sur (2001) studied the profitability analysis of Indian Food products industry: a case study of Cadbury India Ltd. The study attempted to measures the profitability scenario of Cadbury India Ltd. And analyzed the relationship among various profitability ratios and their joint impact using multiple correlation co-efficient and multiple regression method. The study on the inter relation between the selected ratios regarding the company's position and performance and profitability of the company revealed both negative and positive association. In economic boom period, higher financial leverage gives benefits to the firm but on the other hand, in economic recession this financial leverage has adverse impact on firm's profitability. It can cause cash flow problems in economic recession period for the firm and firm might not be able to meet its interest charges. This could be happening because there will be less sale volume in economic recession which make the firm unable to cover the interest payments to the creditors. In the past numerous studies have been conducted on the market and book value measured of leverage as (Jnag, 2005; Titman and Wessels, 1998; Rajan and Zingales, 1995). Historical studies conducted by (Miller, 1977; Myers, 1948; Sheel, 1944) suggest that financial leverage induce cost of capital, at last incline firms profitability and stock price. term financial leverage measured as long term debt to total assets ratio and total financial leverage measure as total debt to assets ratio. The results affirm that relationship between profitability and financial leverage is highly significant and negative which means that firms that are more profitable are very much likely to rely on internal capital in financing their operations.

Significance of the Study

At this competitive world Leverage analysis contribute a lot in maximizing the profits of a company by reducing the fixed cost assets. The Leverage analysis is an important tool to analyze the impact of alternative financial plans on the shareholder's income and it helps to determine the relationship between EBIT-EPS

Statement of the problem:
To study the impact of financial leverage on firm's profitability belongs to cement manufacturing sector of Pakistan.
Hypothesis This particular research primarily focused on testing the following hypothesis:
H1: Financial leverage has significant negative impact on firm profitability

METHODOLOGY

Method of Data Collection
The secondary data necessarily required to perform the research was gathered from the official sites of selected company. Various financial statements during last seven years were used for data extraction.

Variables Description
Profitability is used as dependent variable in this study which was measured as the ratio of net income after tax to total assets. It is a comprehensive indicator of a firm's performance because it provides information as to how well company is using its total assets to generate profits. This ratio gives an indication of a company's total liabilities in relation to their total assets. The higher the ratio, the more leverage the company is using and the more risk it is assuming.

$$\text{ROCE} = \frac{\text{EBIT}}{\text{Total Assets} - \text{Current liabilities}} \times 100 \qquad \text{ROA} = \frac{\text{PAT+Interest Expencess}}{\text{Total Assets}} \times 1$$

OBJECTIVES

1. To understand and evaluate the leverage of the Coromandel packaging pvt ltd.
2. To examine the impact of leverage on profitability.
3. To review the relationship between the financing mix and profitability

RESEARCH DESIGN

Based on the objectives of the study, a descriptive research has been adopted. Descriptive research is one, which largely used to draw interferences about the possible relationships between the variables. It is simplest type of research. It is designed to gather descriptive information and provides information for formulating more sophisticated studies.
Period of study: The period of study 7 years (2010- 2016)

Descriptive Statistics:

	No. of years	Minimum	Maximum	Mean	Std. Deviation
ROCE	7	0.02	17.14	8.77	4.63
ROE	7	0.11	61.29	93.91	9.55
ROA	7	2.56	8.87	43.46	5.98
EPS	7	0.99	4.74	2.22	1.27
DOL	7	-13.28	4.39	-19.42	43.28

DFL	7	-1.92	10.58	20.40	45.33
DCL	7	-13.28	1.66	-37.01	80.53

CORRELATION: Return on Capital Employed:

Correlations					
		ROCE	DOL	DFL	DCL
ROCE	Pearson Correlation	1	.501	-.052	.353
	Sig. (2-tailed)		.252	.912	.438
	N	7	7	7	7
DOL	Pearson Correlation	.501	1	.253	.597
	Sig. (2-tailed)	.252		.585	.157
	N	7	7	7	7
DFL	Pearson Correlation	-.052	.253	1	.316
	Sig. (2-tailed)	.912	.585		.490
	N	7	7	7	7
DCL	Pearson Correlation	.353	.597	.316	1
	Sig. (2-tailed)	.438	.157	.490	
	N	7	7	7	7

Return on Equity:

Correlations					
		ROE	DOL	DFL	DCL
ROE	Pearson Correlation	1	.182	-.088	.659
	Sig. (2-tailed)		.696	.851	.107
	N	7	7	7	7
DOL	Pearson Correlation	.182	1	.253	.597
	Sig. (2-tailed)	.696		.585	.157
	N	7	7	7	7
DFL	Pearson Correlation	-.088	.253	1	.316
	Sig. (2-tailed)	.851	.585		.490
	N	7	7	7	7
DCL	Pearson Correlation	.659	.597	.316	1
	Sig. (2-tailed)	.107	.157	.490	
	N	7	7	7	7

Return on Assets:

Correlations

		ROA	DOL	DFL	DCL
ROA	Pearson Correlation	1	.575	.766*	.086
	Sig. (2-tailed)		.177	.045	.854
	N	7	7	7	7
DOL	Pearson Correlation	.575	1	.253	.597
	Sig. (2-tailed)	.177		.585	.157
	N	7	7	7	7
DFL	Pearson Correlation	.766*	.253	1	.316
	Sig. (2-tailed)	.045	.585		.490
	N	7	7	7	7
DCL	Pearson Correlation	.086	.597	.316	1
	Sig. (2-tailed)	.854	.157	.490	
	N	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Earnings per Share:

Correlations

	EPS	DOL	DFL	DCL
Pearson Correlation	1	.551	-.411	.034
Sig. (2-tailed)		.200	.360	.943
N	7	7	7	7
Pearson Correlation	.551	1	.253	.597
Sig. (2-tailed)	.200		.585	.157
N	7	7	7	7
Pearson Correlation	-.411	.253	1	.316
Sig. (2-tailed)	.360	.585		.490
N	7	7	7	7
Pearson Correlation	.034	.597	.316	1
Sig. (2-tailed)	.943	.157	.490	
N	7	7	7	7

RESULTS & DISCUSSION

The above mentioned table indicates the relationship between the various independent and dependent variables used in the study. It explains that the correlation between ROCE, ROE, ROA, EPS and DOL shows positive correlation which means increase in DOL, increases the ROCE, ROE, ROA and EPS. The correlation between ROCE, ROA and DOL is significant positive correlation. The correlation between ROCE, ROE, EPS and DFL shows positive correlation, which means increase in DFL, increases the ROCE, ROE and EPS. The correlation between ROE and DFL is significant positive correlation. The correlation between ROA and DFL is negative correlation. i-e; increase in DFL, decreases the ROA. The correlation between ROCE, ROE, ROA, EPS and DTL shows positive correlation, which means increase in DTL, increases the ROCE, ROE, ROA and EPS. The correlation between ROCE, ROE, EPS and DTL is significant positive correlation.

CONCLUSION, LIMITATIONS & RECOMMENDATIONS

CONCLUSION

This current study explained the studies and leverage analysis and its impact on profitability with reference to coromandel Pvt ltd, using the panel data of the firm between 2010 to 2016, we examined that whether there is effect of leverage and profitability or not. return on capital employed, return on equity, return on asset and earnings per share as dependent variables and degree of operating leverage, degree of financial leverage and degree of combined leverage as independent variables. After applying correlation descriptive analysis, it is concluded that DOL, DFL, DCL and ROCE, ROE, EPS have positive relationship, and ROA, DCL and ROA also positive relationship while DCL and ROA have inverse relationship. The study is concluded that coromandel pvt, ltd has satisfactory level of operating leverage and combined leverage.

Limitation & Recommendations:

This study was limited to the firms belongs to Coromandel packaging Limited of A.P. Data was taken from year 2010 to year 2016. Profitability was used as dependent variable and was measured as the ratio of net income after tax to total assets and financial leverage was used as the independent variable and was measured as the ratio of total debt to total assets ratio. This study can also be conducted by taking data of firms in the same line of product companies. The packaging sector is highly leveraged sector of India. Major companies have taken debt for expansion of their units which require them to pay fix cost on debt which is very high in India. High fixed cost put adverse impact on firm bottom line which means it reduces net income of the firm. Economic and political uncertainty and worst law and order situation is creating adverse situation for this sector.

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