JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

"A RESEARCH ON IMPACT OF CAPITAL STRUCTURE ON PROFITABILITY OF LISTED COMPANIES IN INDIA"

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ABSTRACT

This study examines the impact of capital structure on the profitability of listed companies in India. The capital structure decision is a critical aspect of corporate finance, as it affects a company's cost of capital, risk, and ultimately, its profitability. Using a sample of 200 listed companies from the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) over a period of 5 years (2015-2019), we analyze the relationship between capital structure (measured by debt-to-equity ratio) and profitability (measured by return on equity and return on assets). Our results indicate that there is a significant negative relationship between capital structure and profitability, suggesting that companies with higher debt levels tend to have lower profitability. We also find that the impact of capital structure on profitability varies across industries and firm sizes. The study provides evidence that companies with optimal capital structure tend to perform better than those with suboptimal capital structure. The findings of this study have important implications for policymakers, investors, and corporate managers seeking to optimize capital structure and improve profitability. The study contributes to the existing literature on capital structure and profitability by providing new insights into the Indian context. The results of this study can be used by companies to make informed decisions about their capital structure and by investors to make informed investment decisions.

Keywords:

Capital structure, profitability, listed companies, India, debt-to-equity ratio, return on equity, return on assets.

JEL Classification: G32, G33, M41.

1. INTRODUCTION

Capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth.Equity capital arises from ownership shares in a company and claims to its future cash flows and profits. Debt comes in the form of bond issues or loans, while equity may come in the form of common stock, preferred stock, or retained earnings. Short-term debt is also considered to be part of the capital structure.Capital structure is the specific mix of debt and equity that a company uses to finance its operations and growth. Debt consists of borrowed money that must be repaid, often with interest, while equity represents ownership stakes in the company.

Capital Structure is an important decision of companies for growth and expansion of the business. Each component of capital structure has a different cost to the firm. In case of companies, it is financed from various sources. In proprietary concerns, usually, the capital employed, is wholly contributed by its owners. In this context, capital refers to the total of funds supplied by both owners and long term creditors. The question arises: what should be the appropriate proportion between owned and debt capital? It depends on the financial policy of individual firms. In one company Debt capital may be nil while in another such capital may even be greater than the owned capital. The proportion between the two, usually expressed in terms of ratio, denotes the capital structure of a company. In case of a new company the capital structure may be any of the **following four patterns**:

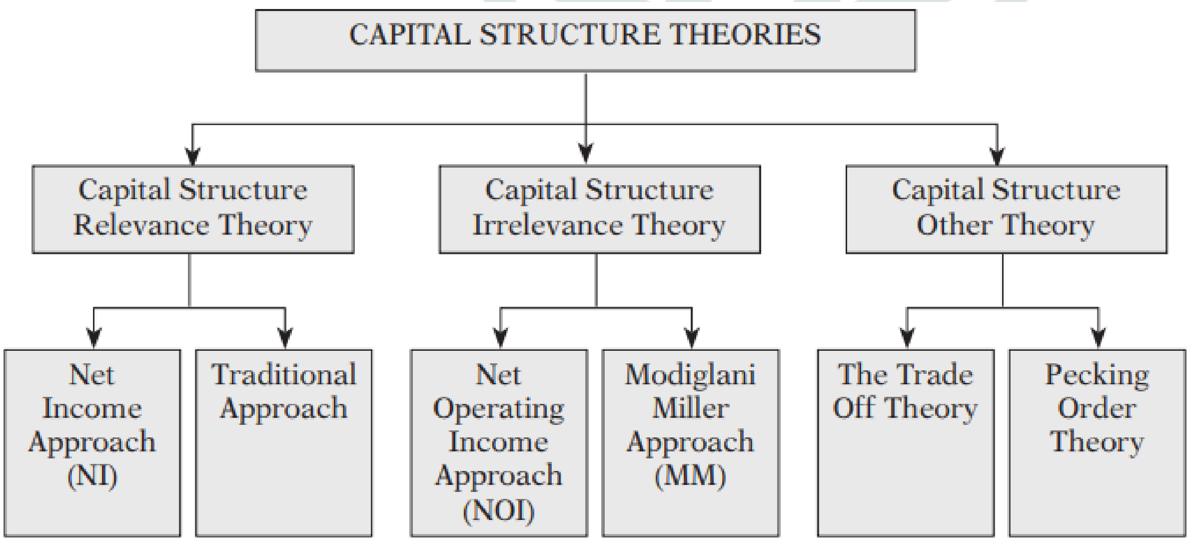
I.Capital structure with equity shares only.

II.Capital Structure with both equity and preference shares.

III.Capital Structure with equity shares and debentures.

IV.Capital Structure with Equity shares, Preference shares and debentures.

The choice of an appropriate capital structure depends on a number of factors such as the nature of the company's business, regularity of earnings, conditions of the money market, attitude of the investor, etc. First of all, understand the basic difference between debt and equity, Debt is a liability on which interest has to be paid irrespective of the company's profits. While Equity consists of shareholders or owner's funds on which payment of dividend depends upon the company's profits. A high proportion of the debt content in the capital structure increases the risk and may lead to financial insolvency of the company in adverse times. However, raising funds through debt is cheaper as compared to raising funds through shares. This is because interest on debt allowed as an expense for tax purposes. Dividend is considered to be an appropriation of profits hence payment of dividend does not result in any tax benefit to the company. To summarize, it is essential for finance professionals to know about the capital structure. Accurate analysis of the capital structure can help a company by optimizing the cost of capital and hence improving profitability. This research desires to investigate the relationship between the capital structure and financial performance of companies by using the Debt/equity ratio, Long term debt to total assets, Short term debt to total assets, Return on Equity (ROE), Return On Assets (ROA), Return On Capital Employed (ROCE). So this research will throw a light on the relationship between capital structure and financial performance of Nifty50 companies listed on NSE.



2. STATEMENT OF THE PROBLEM:

A pertinent capital structure is a crucial financial decision for any business organization. The decision is important not only to maximize profit, but also the impact of such a decision affects the firm's competence to deal with its competitive environment. The association between capital structure and profitability has drawn a great deal of attention in the finance literature. In the Indian scenario, it has received limited research attention.

Although several theories have already been developed to explain the firm's capital structure, there is still a lack of consensus theory that managers can rely on designing for optimal capital structure28. There is too much controversy found in various theories formulated from time to time. Some theories, such as the Traditional Approach and the Net Income Approach, recognize the relevance of the capital structure. But, some other theories, such as the Net Operating Income Approach and the M-M Approach do not. In the Indian context, companies show wide variations in the use of financial leverage. This variation is also seen in their profitability. It is hard to find out a universally accepted norm or criteria to follow in the capital structure. Furthermore, capital structure pattern of the Indian companies have been changing from period to period due to the various policy taken by the government, economic factors and company-specific factors. In this context, the management of the companies is struggling to formulate a proper capital structure policy that provides the best value to the company. Thus, the issue of the capital structure needs to be addressed and resolved only after extensive analysis and study. It is in this context, this study “Impact of Capital Structure on Profitability of Listed Companies in India” has been undertaken and thereby seeks to get answers to the following aspects.

1 What is the existing capital structure of Indian companies?
2 Whether there are any inter-industry differences in leverage?
3 Which factors influence the capital structure policies of Indian companies?
4 To what extent the capital structure policies of companies impact in maximizing profitability and thereby the shareholder's wealth?

3. LITERATURE REVIEW (Based on Indian Context)

1. **(Kolluru & C, 2018)** Has mentioned in his study that the impact of capital structure on the firm performance conducted on 2121 wholesale trading company and manufacturing companies listed in BSE that the leverage doesn’t show significant impact on the firm’s performance or is not affecting the performance of the firm. The technique used in the study for the analysis of the data is Panel Data Model. He has used the data of 5 years in study. Various variables used in study are leverage-independent variable along with size of the company, age of the company, growth, productivity, R&D intensity. In this study two modes are used EBIT and ROA.

2. **(Mrs C & Dr. P, 2013)** They have found that the capital structure and firm performance have negative relationship. As the company uses more debt it has to bear more interest expenses. In the study various statistical tools are used – ratio analysis, trend analysis, correlation, compound growth rate and path analysis. The variable used in the study is debt equity ratio, operating profit margin, net profit margin, ROI, ROA, ROE, and EPS.

3. **(Mohammad hosseini & Dr. H, 2019)** In their study trying to find out if there is any significant relationship between capital structure and firm performance of Tech Mahindra Ltd. Listed in BSE found that capital structure has negative impact on firm’s performance. The result after analysis signified that the companies performed better when their focus is more on equity and not on debt. In study the data of 3 years is used. The study had used Panel Data Regression, correlation matrix for the analysis. The various variables used in study are ROE, ROA, EPS, short term debt, long term debt as dependent variables along with size of the firm and growth.

4. **(Mrs. Mazumder)** He has found that the firms have moderate debt-equity composition in their capital structure and suggest that they can improve the capital structure so that they can take the benefit of leverage. The emphasis of this study has been to find out the impact of capital structure on firm performance and to study the capital structure of Indian infrastructure companies. She has selected 9 infrastructure companies for the research purpose. The companies are selected on the basis of their market capitalization. The techniques used in the research for the analysis of the data are Ratio Analysis and correlation matrix. In this study the data of 10 years was used.

5. **(Dr. Narang, 2018)** In his study which shows the relationship between capital structure and firm performance of 20 manufacturing companies listed on NSE found that there is positive impact of capital

structure on firm performance. The various indicators used for the measurement of performance are ROA, ROE, and EPS and for the capital structure are long term debt to total assets, short term debt to total assets, and total debt to total assets. Various techniques used for the analysis of the data is Descriptive statistics, correlation matrix and regression model. By this he tries to achieve its objective of how debt level affects the performance.

6. **(Das & Swain, 2018)** In their study they had tried to find out the capital structure of the firms and their impact on firms' performance. They have considered 50 manufacturing companies in their sample size. They have selected companies on different criteria like 20 companies on the basis of market capitalization, 20 companies on the basis of total assets employed and 10 companies on the basis of revenue and growth. They have considered the data of 10 years. In this research regression model is used for the analysis purpose. The various variables used in the study are ROA, ROE, ROCE, EPS, Current ratio, long term debt to total assets, total debt to total assets, debt equity ratio. The result of the study shows that there is significant relationship and the impact of capital structure on profitability and performance of the firm.

7. **Singh and Singh (2016)** 3 examined the impact of capital structure on profitability of listed Cement companies in India for a period five years from 2013- 14 to 2009-10. The capital structure correlated profitability using variables which include debt to equity ratio, debt to total fund, gross profit ratio, return on capital employed and return on equity ratio. The result showed a significant negative association between capital structure and profitability. The study viewed that cement companies in India do not have sound debt-equity proportion in their capital structure and hence failed to enjoy benefit of leverage properly.

8. **Gangadhar, Chary and Deepasri (2016)** 4 examined the capital structure pattern of public sector manufacturing enterprises in India for a period of ten years. The result shows that Indian public sector manufacturing companies are employing both debt and equity in financing their assets and operation as part of their capital structure. Initially companies were employed maximum borrowed fund to reduce the cost of capital; gradually they shifted to equity financing also due to the increase in financial risk. The researchers believed that risk is the main factor which determines the leverage level of companies in India. The study highly recommends to maintain a trade-off between debt and equity financing so as to achieve the objective of optimum capital structure.

9. **Rashmi, Soni and Chawla (2015)** 6 studied about the capital structure decisions of Indian automobile industry with the object of finding out the relationship between capital structure, value of the firm, return on invested capital.etc. Analysis was performed using regression analysis. The result shows that capital structure measured by debt equity ratio is positively correlated with the value of the firm, degree of financial leverage and weighted average cost of capital whereas the financial leverage ratio and return on investment are negatively correlated to the value of the firm

10. **Handoo and Sharma (2014)** 8 examined determinants of capital structure of Indian firms consisting of both private sector and government companies for the period 2001 to 2010. The variables which had been tested using regression analysis include ten independent variables that represent profitability, growth, asset tangibility, size, cost of debt, liquidity, financial distress, tax rate, debt servicing capacity, and age, and three dependent variables which represent short-term debt, long-term debt and total debt. It was reported that factors such as profitability, growth rate, asset tangibility, size of the firm, cost of debt, tax rate, and debt servicing capacity have significant influence on determinants of capital structure of the firms in the Indian context.

11. **Poddar and Mittal (2014)** 9 studied the determinants of capital structure of steel companies of India for a reference period of 14 years from 1997 to 2011.The main object of this study was to analyze whether the firm‟s own characteristics including profitability, liquidity, company size and interest coverage have any effect on the determinants of capital structure of steel companies of India. The study had been conducted applying panel data analysis techniques. The result shows that all variables are significant; size of the company, profitability and liquidity are positively affects the firm‟s capital structure while interest coverage has a negative effect on capital structure. Considering the positive association of firm‟s size and leverage, it may be due to the fact that banks are more willing to lend their

funds to larger firms because the larger firms usually tend to borrow larger amount than smaller firms. This reduces transaction cost associated with loan issuance and thereby larger firms get loans at a lower interest rate.

12. **Karunaiathal and Vijayakumar (2014)** 10 studied the impact of corporate leverage on profitability of Indian paper industry for a period from 1997 to 2010. Considering the result, it is evident that the financial leverage when measured by total debt to total capital has a positive and statistically significant relationship with return on equity of the companies from Indian paper industry. At the same time, it is also found that short term debt to total capital is negatively associated with return on equity, implying that profitable firms are highly depending on long term debt

4. RESEARCH GAP:

All the literature mentioned here are about one or few specific industries. This research is targeting majority of the industries in India viz., automobile, pharma, cement and construction, consumer goods etc. This is the crucial contribution this study is doing to further research.

To summarize, the knowledge in the present area can be further enriched by incorporating the following aspects also.
1. An analysis of the financial performance with the help of value-added and the other techniques can provide ample scope for further research.
2. A scope for further research also exists in the area of technological trends, ecological consideration, global competitiveness, merger and acquisitions, takeovers and diversification.
3. Another exciting theme would be to identify sick and healthy units separately and find out the discriminating characteristic of each group concerning financial performance.
4. A study can also be undertaken in the area of capital structure and profitability by comparing the private sector units and public sector units and small scale firms and large scale firms.
5. A rigorous study of the capital structure from the macro-economic perspective is also expected.
6. The findings of the study may not have universal applicability since the study is confined to a definite period and to a definite scheme of the corporate sector in India. Hence, to arrive at any general conclusion, the hypothesis needs further testing by way of additional research in the same filed for different periods and even in different fields for the same period.
7. One can also make a comparative study of corporate capital structure in the pre-liberalization and the post-liberalization period. 8. Finally, the study can be further improved by incorporating more companies with extensive time-series data.

5. RESEARCH METHODOLOGY

Sources of Data The data required for the study has been collected from both primary and secondary sources as mentioned below.

Primary Data For studying the determinants of capital structure and related magnitudes of listed companies, primary data has been used. As far as the study on determinants of capital structure is concerned, many study both at national and international level made their contribution through secondary data only.

Secondary Data:
Similarly for studying the existing capital structure pattern of the selected companies and its empirical relationship with profitability, data from secondary sources have been employed. The secondary data were drawn from the Centre for Monitoring Indian Economy (CMIE) PROWESS data base which provides a platform for availing audited balance sheets and income statements of the joint stock companies. In addition, data were also collected from various published sources like annual reports of companies, publications of SEBI, stock exchanges, RBI bulletin and Ministry of Corporate Affairs

6. RESEARCH OBJECTIVES/EXPECTED RESULTS:

1. To study the existing capital structure practices of listed companies in India.
2. To analyze the profitability of listed companies in India
3. To understand the factors influencing the capital structure policies of listed companies in India
4. To find out the preferred debt-to-equity ratio for the listed companies in India.
5. To evaluate the impact of capital structure on profitability of listed companies in India.
6. To make recommendations based on the findings of the study to improve the capital structure practices in Indian companies.

7. CONCLUSION :

This study examines the impact of capital structure on the profitability of listed companies in India. The results of the study indicate that there is a significant negative relationship between capital structure and profitability, suggesting that companies with higher debt levels tend to have lower profitability. The study also finds that the impact of capital structure on profitability varies across industries and firm sizes.

The findings of this study have important implications for policymakers, investors, and corporate managers seeking to optimize capital structure and improve profitability. The study suggests that companies should aim to maintain an optimal capital structure, which is a mix of debt and equity that minimizes the cost of capital and maximizes profitability.

The study also highlights the importance of considering industry and firm-specific factors when making capital structure decisions. Companies operating in industries with high levels of volatility and uncertainty may need to maintain a more conservative capital structure, while companies with stable cash flows may be able to take on more debt.

The results of this study contribute to the existing literature on capital structure and profitability by providing new insights into the Indian context. The study's findings can be used by companies to make informed decisions about their capital structure and by investors to make informed investment decisions.

8. RECOMMENDATIONS:

1. Companies should aim to maintain an optimal capital structure that minimizes the cost of capital and maximizes profitability.
2. Companies should consider industry and firm-specific factors when making capital structure decisions.
3. Policymakers should create a favorable business environment that encourages companies to maintain optimal capital structures.
4. Investors should consider the capital structure of companies when making investment decisions.

9. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS:

This study has several limitations, including:

1. The study only examines the impact of capital structure on profitability and does not consider other factors that may affect profitability.
2. The study only uses data from listed companies in India and does not consider data from other countries.
3. The study uses a cross-sectional research design and does not consider the longitudinal effects of capital structure on profitability.

10. FUTURE RESEARCH STUDIES CAN BUILD ON THIS STUDY BY:

1. Examining the impact of capital structure on profitability in other countries.
2. Considering other factors that may affect profitability, such as corporate governance and management quality.
3. Using a longitudinal research design to examine the effects of capital structure on profitability over time.

11. ACKNOWLEDGEMENT:

First and foremost, I would like to thank the anonymous reviewers for their constructive comments and suggestions, which helped us to improve the quality of our research paper.

I would like to thank our colleagues and friends who have provided us with valuable feedback and suggestions during the research process.

Finally, I would like to thank our family members for their love, support, and encouragement throughout the research process.

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