INTERNATIONAL JOURNAL OF TECHNO-ENGINEERING
IJTE

ISSN: 2057-5688

Impact of Capital structure on Profitability -With Special Reference to New India Assurance -An Empirical Evidence.

P Harika
Research Scholar, UCMH, Jawaharlal Nehru Technological University Hyderabad
harika_rao2001@yahoo.co.in

Dr. R S Ch Murthy Chodisetty
Associate Professor, Vardhaman College of Engineering, Hyderabad, Telangana.
chodisetty.b4u@gmail.com

ABSTRACT

The capital structure of a firm is the composition or structure of its liabilities and therefore it influences the behavior of the company as well as its performance results and also affects its value. The present study is an explanatory and non-experimental in nature and intended to examine the nature of capital structure and firm's performance. The time period of the study comprises of ten years i.e. 2006-07 to 2014-15 and the data of eight trading companies listed in Bombay Stock Exchange (BSE) have been analyzed. The collected data was entered into the EViews and multiple regression analysis method was used for analyzing and testing of hypotheses. Results of the study reveal that capital structure influences financial performance of firm. The findings show that equity and long-term debt have a positive and significant effect, whereas short term debt has a negative impact on financial performance. This paper explains about Capital structure of New India Assurance on Profitability using Ratios and descriptive statistics.

Keywords: Capital Structure, Profitability, Financial performance, New India Assurance.
JEL Codes: O16, O17, O18, O19.

ISSN: 2057-5688

1. INTRODUCTION:

The most crucial component of starting a business is capital. It acts as the foundation of the company. Debt and Equity are the two primary types of capital sources for a business. Capital structure is defined as the combination of equity and debt that is put into use by a company in order to finance the overall operations of the company and for its growth. Capital structure in corporate finance is the mix of various forms of external funds, known as capital, used to finance a business. It consists of shareholders' equity, debt (borrowed funds), and preferred stock, and is detailed in the company's balance sheet. The larger the debt component is in relation to the other sources of capital, the greater financial leverage (or gearing, in the United Kingdom) the firm is said to have. Too much debt can increase the risk of the company and reduce its financial flexibility, which at some point creates concern among investors and results in a greater cost of capital. Company management is responsible for establishing a capital structure for the corporation that makes optimal use of financial leverage and holds the cost of capital as low as possible.

Capital structure is an important issue in setting rates charged to customers by regulated utilities in the United States. The utility company has the right to choose any capital structure it deems appropriate, but regulators determine an appropriate capital structure and cost of capital for ratemaking purposes. Various leverage or gearing ratios are closely watched by financial analysts to assess the amount of debt in a company's capital structure. The Miller and Modigliani theorem argues that the market value of a firm is unaffected by a change in its capital structure. This school of thought is generally viewed as a purely theoretical result, since it assumes a perfect market and disregards factors such as fluctuations and uncertain situations that may arise in financing a firm. In academia, much attention has been given to debating and relaxing the assumptions made by Miller and Modigliani to explain why a firm's capital structure is relevant to its value in the real world.

Some of the important definitions are presented below:

According to Gere Stenberg, ‘capital structure of a company refers to the composition or make up of its capitalization and it includes all long term capital resources viz., loans,

ISSN: 2057-5688

reserves, shares and bonds'. Keown et al. defined capital structure as, 'balancing the array of funds sources in a proper manner, i.e. in relative magnitude or in proportions'.

In the words of P. Chandra, 'capital structure is essentially concerned with how the firm decides to divide its cash flows into two broad components, a fixed component that is earmarked to meet the obligations toward debt capital and a residual component that belongs to equity shareholders'.

Importance of Capital Structure:

Value Maximization:

Capital structure maximizes the market value of a firm, i.e. in a firm having a properly designed capital structure the aggregate value of the claims and ownership interests of the shareholders are maximized.

Cost Minimization:

Capital structure minimizes the firm's cost of capital or cost of financing. By determining a proper mix of fund sources, a firm can keep the overall cost of capital to the lowest.

Increase in Share Price:

Capital structure maximizes the company's market price of share by increas-ing earnings per share of the ordinary shareholders. It also increases dividend receipt of the shareholders.

Investment Opportunity:

Capital structure increases the ability of the company to find new wealth- creating investment opportunities. With proper capital gearing it also increases the confidence of sup-pliers of debt.

2. REVIEW OF LITERATURE:

- **N. Narsaiah (2020):** The article titled "Does Capital Structure Impact on Financial Performance: Evidence from India" examined the impact of capital structure on financial performances of listed on BSE. The researcher has selected 100 Indian manufacturing companies over the period 2014 – 2019. In order to attain the objectives, he used regression techniques. Finally, the researcher found that long term debts and total debts decreased the financial performance.
- **Purnima Rao, Satish Kumar and Vinodh Madhavan (2019):**The article titled "A Study on Factors Driving the Capital Structure Decisions of Small and Medium Enterprises (SMEs) in India" examined the factors affecting the capital structure decisions of small and medium enterprises in India. The researchers have selected 174

ISSN: 2057-5688

non-financial firms. In order to attain the objective, they used Generalized method of moments. They found that the applicability of pecking order theory of SMEs in India.

- **Shailaja (2019):** The article titled "Optimization of Capital Structure for Increased Profitability" was examined to know the factors which are influencing capital structure. The researcher collected data for 6 years i.e, 2012-2018. The data is collected from 100 IT firms across India. To analyse the data, she used statistical tools namely coefficient of variation, mean, standard deviation and ratios. The researcher found that IT companies with low capital and low operating expenses are highly profitable despite of their debt capital ratio capital structure.
- **Shalini. R and Mahua Biswas (2019):** The article titled "Capital Structure Determinants of S&P BSE 500: A panel Data Research". The researcher selected 416 companies belonging to 14 industrial sectors listed in S&P BSE for a duration of 19 years which is from 2000 to 2018. To achieve the objective of the research she used multiple regression model to understand the influence of selected variables on capital structure. The researchers finds that 4 explanatory variables like size, tax paid, depreciation to total assets ratio and profitability ratio are statistically significant capital structure.
- **S. Hema Prasanna (2018):** The article titled "Determinants of Capital of Indian Pharmaceutical Industry" examined to identify the capital structure of the selected companies in the Indian Pharmaceutical industry. The researcher has selected 10 companies of Indian Pharmaceutical industry. In order to attain the objectives, she used correlation, regression and step wise regression. Finally, the researcher found that among the sixteen variables, two variables namely solvency ratio and liquidity are the prominent variables which determine the capital structure of Indian Pharmaceutical Industry.
- **Chandrika Prasad Das, Rabindra Kumar Swain (2018):** The article titled "Influence of Capital Structure on Financial Performance" examined the determinants of capital structure and its impacts on financial performance. They used secondary data and taken from 50 top companies for the study. In order to attain the objectives, the researchers used regression model. Finally, the researcher found that there is a significant relationship between capital structure and profitability and capital structure has significant impact on financial performance of sample companies.

ISSN: 2057-5688

- **Atif Ghayas and Javaid Akhter (2018):** The article titled "Impact of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in India "examined the impact of capital structure decision on the firm's profitability. Therea searchers selected 35 Indian pharmaceutical companies listed on Bombay Stock Exchange (BSE) during the period of 5 years from 2012 to 2016. In order to attain the objective, they used regression analysis. Finally they found that there is a positive effect of SDA and DA on ROE, while a weak-to-no effect was found of LDA on ROE.
- **Rosy Dhingra, Dr. Madhuri Gupta, Dr. Kapil Dev (2018):** The article titled "An empirical study- Capital Structure of Indian IT Sector" examined to analyse the extent of which selected financial variables affect the capital structure of IT companies listed with BSE. The researchers are selected a sample of 20 IT sector companies for the period of 10 years from April 1st 2008 to March 31st 2017. In order to attain the objective, they used pooled OLS (ordinary least squares) Model. Finally, they found that financial variables play a vital role in determining capital structure, especially variables like long term profitability and tangibility.
- **Rosy Dhingara and Kapil Dev (2016):** The article titled "Determinants of Capital Structure – A Study of Oil Industry in India" examined the determinants and the effects of accounting variables on capital structure of oil companies listed on NSE. The researchers selected 10 oil companies listed on NSE. In order to attain the objective, they used panel regression. Finally, they found that accounting variable like financial strength is positively related to leverage and other variables are negatively related.
- **Dr. Mohd Taqi, Dr. MohdAjmal and Dr. Asif Pervez (2016):** The article titled "Impact of Capital Structure on Profitability of Selected Trading Companies of India" examined to understand the relationship between capital structure and financial performance of the company. The researchers selected eight trading companies listed in the BSE. In order to attain the objectives, the researcher used multiple regression analysis method for analyzing and testing of hypothesis. Finally, they found that capital structure influences financial performance of firm.

3. STATEMENT OF THE PROBLEM:

Capital structure of the firm. Financial managers find it tough to exactly determine the optimal capital structure. A firm has to issue various securities in a countless mixture

ISSN: 2057-5688

combination so that it can maximize its overall value and gives its optimal capital structure. If a wrong mix of finance is employed then the performance and survival of the business enterprise may be seriously affected. Survival and growth needs resources but financing of these resources has its own limitations. Therefore, the present study is an attempt undertaken to know the impact of capital structure on financial performance of selected trading companies in India. It is always quite problematic to design specific and optimal capital structure for the firms that can maximize the firm's performance, profitability and shareholders' wealth regardless of their size and other factors. Due to the risk associated with violating agency cost theory and capital structure decisions, we have to select the best possible capital structure. The optimal capital structure in different economies has different ratios that contribute in the problem of analyzing and measuring their impact on firm's performance, Profitability and Shareholders' wealth.

4. RESEARCH GAP:

The previous studies particularly on large firms have focused on the relationship between corporate size, fixed assets and financial leverage. Little has been studied on how and to what extent these variables (debt financing) make an influence on the financial performance of firms using data from the firm level. This study will seek to establish the effect of capital structure on the financial performance of Indian Trading sector firms listed on the Bombay Stock Exchange (BSE).

4. OBJECTIVES OF THE STUDY:

- To Study the Role of Capital Structure in India.
- To Study the Capital Structure of Selected New India Assurance.
- To examine the nature of relationship between Capital Structure and Profitability of New India Assurance.
- To Study the impact of debt equity ratio on profitability of New India Assurance.

5.HYPOTHESES OF THE STUDY:

H0: There is no relationship between Capital Structure and Profitability of New India Assurance

H1: There is a relationship between Capital Structure and Profitability of New India Assurance

H0: There is no Significant Impact of Dept-Equity ratio on Profitability of New India

ISSN: 2057-5688

Assurance

H1: There is a Significant Impact of Dept-Equity ratio on Profitability New India Assurance

6. RESEARCH METHODOLOGY:

- **Sources of Data:** The secondary data were obtained from the annual reports of the ten public sector banks. Additional data for analysis and verification were sourced from ww.moneycontrol.com. The data were subjected to certain fundamental mathematical operations such as computing the ratios, before being used for the analysis.
- **Research tools:**
  - Correlation
  - Regression
  - Descriptive Statistics
  - Stationary test
  - Regression Analysis
  - OLS (Ordinary Least Square) Method

7. Scope of the Study:

The present study is primarily concerned with the issue of capital structure and financial Performance of eight selected companies of Indian trading sector listed on Bombay Stock Exchange, there are 6 trading companies used in the study. The tenure of the study is for 5 years from 2016-17 to 2020-2021.

8. NEED FOR THE STUDY:

It is difficult to determine the capital structure of the firm. Financial managers find it tough to exactly determine the optimal capital structure. A firm has to issue various securities in a countless mixture combination so that it can maximize its overall value and gives its optimal capital structure. Therefore, the present study is an attempt undertaken to know the impact of capital structure on financial performance of selected trading companies in India.

9.LIMITATIONS OF THE STUDY:

- The limitation of the study is that the samples focuses on selected companies of Indian trading sector listed on Bombay Stock Exchange and doesn't cover other sectors.
- The secondary data considered for the study which consists of selected variables collected

10. RESULT AND DISCUSSION:

ISSN: 2057-5688

1. To examine the nature of relationship between Capital Structure and Profitability of Insurance Companies in India.

Table Shown Correlations of New India Assurance from2016-17 to 2020-2021.

Year	Capital(x)	Dx	Dx2	Net profit(y)	Dy	Dy2	Dx*dy
2020-21	824	624	389376	1640	1035	1071225	645840
2019-20	824	624	389376	1442	837	700569	522288
2018-19	824	624	389376	605	0	0	0
2017-18	412	212	44944	2190	1585	2512225	336020
2016-17	200	0	0	1046	441	194481	0
	3084	**2084**	**1213072**	**6923**	**3898**	**4478500**	**1504148**

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}}$$

Correlation (r) = 0.171278487

Table Shown Regression of New India Assurance from2016-17 to 2020-2021.

Year	Capital(x)	Net profit(y)	X2	Y2	Xy
2020-21	824	1640	678976	2689600	1351360
2019-20	824	1442	678976	2079364	1188208
2018-19	824	605	678976	366025	498520
2017-18	412	2190	169744	4796100	902280
2016-17	200	1046	40000	1094116	209200
	3084	**6923**	**2246672**	**11025205**	**4149568**

$$A = \frac{(\Sigma y)(\Sigma x^2) - (\Sigma x)(\Sigma xy)}{n(\Sigma x^2) - (\Sigma x)^2}$$

$$B = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{n(\Sigma x^2) - (\Sigma x)^2}$$

Regression Values a=60.4284647, b=-0.013212593

Result & Discussion:

Above Tables shows that Capital Structure Rations and Profitability Ratios are explain about values and also shown Impact on Capital Structure on Profitability position of LIC of India is good. The Correlation and Regression shows that positives relationship between Capital on Profitability of LIC of India.

Regression Statistics New India Assurance from 2016-17 to 2020-2021

Regression Statistics	
Multiple R	Multiple R
R Square	R Square
Adjusted R Square	Adjusted R Square

INTERNATIONAL JOURNAL OF TECHNO-ENGINEERING
IJTE
ISSN: 2057-5688

Descriptive Statistics of New India Assurance from 2016-17 to 2020-2021

Standard Error		Standard Error			
Observations		Observations			
ANOVA					
Regression	Regression	Regression	Regression	Regression	Regression
Residual	Residual	Residual	Residual	Residual	Residual
Total	Total	Total	Total	Total	Total
Intercept	Intercept	Intercept	Intercept	Intercept	Intercep
824	824	824	824	824	824

	2020-21	2019-20	2018-19	2017-18	2016-17
Mean	1228	1211	1163.5	1075	977.5
Standard Error	228	211	163.5	75	22.5
Median	1228	1211	1163.5	1075	977.5
Mode	#N/A	#N/A	#N/A	#N/A	#N/A
Standard Deviation	322.4406922	298.3990617	231.2239174	106.0660172	31.81980515
Sample Variance	103968	89042	53464.5	11250	1012.5
Kurtosis	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Skewness	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Range	456	422	327	150	45
Minimum	1000	1000	1000	1000	955
Maximum	1456	1422	1327	1150	1000
Sum	2456	2422	2327	2150	1955
Count	2	2	2	2	2

Result & Discussion:

Above Tables shows that Capital Structure Rations and Profitability Ratios are explain about values and also shown Impact on Capital Structure on Profitability position of New India Assurance is good. Descriptive Statistics and Regression Statistics shows that Positive impact on Capital structure on Profitability. Capital structure refers to the firm's financial framework which consists of the debt and equity used to finance the firm. Capital structure in financial term means the way by which a firm finances their assets through the combination of equity, debt or hybrid securities (San & Heng,2011). Capital Structure of a firm is the composition of different securities issued by the firm to finance its operations

Profitability and Capital Structure Ratios
New India Assurance from 2016-17 to 2020-2021

Year	Net profit	Net sales	Net profit ratio
2020-21	1640	30930	5.302295506
2019-20	1442	28199	5.113656513
2018-19	605	27514	2.19888057
2017-18	2190	19692	11.12126752
2016-17	1046	19320	5.414078675

ISSN: 2057-5688

Net Profit Ratio = Net Profit/Net Sales*100

Year	Operating profit	Net sales	Operating profit ratio
2020-21	-565	30930	-1.826705464
2019-20	-1066	28199	-3.780275896
2018-19	-318	27514	-1.155775242
2017-18	-4773	19692	-24.23826935
2016-17	-524	19320	-2.712215321

Operating Profit Ratio = Operating Profit/Net Sales*100

Year	Operating expenses	Net sales	Operating ratio
2020-21	31496	30930	101.8299386
2019-20	29265	28199	103.7802759
2018-19	27832	27514	101.1557752
2017-18	24464	19692	124.2331911
2016-17	19844	19320	102.7122153

Operating Ratio = Operating Expenses/Net Sales*100

Year	Net profit	Total assets	Return on assets
2020-21	1640	91420	1.79391818
2019-20	1442	76340	1.888917998
2018-19	605	79658	0.759496849
2017-18	2190	74906	2.923664326
2016-17	1046	69331	1.50870462

Return on Assets = Net Profit/Total Assets*100

Year	Net profit	Shareholders' equity	Return on equity
2020-21	1640	824	199.0291262
2019-20	1442	824	175
2018-19	605	824	73.4223301
2017-18	2190	412	531.5533981
2016-17	1046	200	523

Return on Equity = Net Profit/Shareholders Equity*100

Year	Total liabilities	Shareholders' equity	Debt to equity ratio
2020-21	66675	824	8091.626214
2019-20	55503	824	6735.800971
2018-19	56195	824	6819.781553
2017-18	50756	412	12319.41748
2016-17	49180	200	24590

Debt to Equity Ratio = Total Liabilities/Shareholders Equity *100

Year	Total liabilities	Fixed assets	Debt to fixed assets ratio
2020-21	66675	407	16382.06388
2019-20	55503	466	11910.51502

ISSN: 2057-5688

2018-19	56195	474	11855.48523
2017-18	50756	479	10596.24217
2016-17	49180	2004	2454.091816

Debt to Fixed Assets Ratio = Total Liabilities/Fixed Assets*100

Year	Total liabilities	Current assets	Debt to current assets ratio
2020-21	66675	24639	270.6075734
2019-20	55503	24470	226.8205966
2018-19	56195	19949	281.693318
2017-18	50756	18856	269.1769198
2016-17	49180	17537	280.4356503

Debt to Current Assets Ratio = Total Liabilities/Current Assets*100

Year	Roce
2020-21	9%
2019-20	7%
2018-19	-2%
2017-18	2%
2016-17	3%

ROCE = EBIT/Capital Employed

Result & Discussion:

According to my analysis shows that 9 ratios out of which 6 are profitability ratios like Net profit ratio, Operating profit ratio, Operating ratio, Return on assets ratio , Return on equity ratio and Return on capital employed(ROCE) and remaining 3 are Debt to equity ratio, Debt to fixed assets ratio, Debt to current assets ratio were used for 5years from 2016-17 to 2020-2021 for the purpose of profitability, capital structure and other inventories.

11. CONCLUSION OFTHE STUDY:

The research based on LIC of India. The data is collected for 5 years for each company since 2016-17 to 2020-21. I used various statistical tools like correlation, regression, regression statistics, descriptive statistics and ratio analysis for all the companies. I calculated 9 ratios out of which 6 are profitability ratios and remaining 3 are capital structure ratios. The correlation and regression statistics said that the relationship between profitability and capital structure is positively and negatively identified. In descriptive statistics said that whether mean, median, skewness , kurtosis and standard deviation values are positively affected to insurance companies in India. I conducted ANOVA to determine whether the relationship

ISSN: 2057-5688

exits between the companies. Finally, profitability ratios shows that in future profitability position of the companies are good.

12. REFERENCES:

- N. Narsaiah (2020), "Capital structure impact on financial performance: Evidence from India", Academy of Accounting and Financial Studies Journal.
- Purnima Rao, Satish Kumar and Vinodh Madhavan (2019), "A Study on factors driving the capital structure decisions of small and medium enterprises (SMEs) in India", IIMB Management Review.
- Shailaja (2019), "Optimization of capital structure for increased profitability", International Journal of Engineering and Advanced Technology (IJEAT).
- Shalini R, Mahua Biswas (2019) "Capital structure determinants of S&P BSE 500: A panel data research", International Journal of Recent Technology and Engineering (IJRTE).
- S. Hema Prasanna (2018), "Determinants of capital structure of Indian pharmaceutical industry", World Wide Journal of Multidisciplinary Research and Development.
- Chandrika Prasad Das and Rabindra Kumar Swain (2018), "Enflurane of capital structure on financial performance", KIIT Journal of Management.
- AtifGhayas and Javaid Akhter (2018), "Impact of Capital Structure on profitability: An empirical analysis of listed firms in India", Asian Journal of Managerial Science.
- Rosy Dhingra, Dr. Madhuri Gupta, Dr. Kapil Dev (2018), "An empirical study-Capital structure of Indian IT sector", International Journal of Research and Analytical Reviews.
- Rosy Dhingra and Kapil Dev (2016), "Determinants of capital structure-A study of oil industry in India", International Journal of Engineering and Management Research.
- Dr. MohdTaqi, Dr. MohdAjmal and Dr. Asif Pervez (2016),"Impact of capital structure on profitability of selected Indian Trading companies of India", Arabian Journal of Business and Management Review.
- Sandip Sinha, Pradip Kr. Samanta (2014), "Determinants of capital structure of selected Indian Cement companies-A quantile regression approach", Vidya Sagar University Journal of Commerce.

ISSN: 2057-5688

- AnshuHandoo and KapilSharma (2014), "A study on determinants of capital structure in India", IIMB Management Review.
- Dr. Rohit R. Manjule (2014), "Impact of Capital Structure of Indian industries", International Journal of Scientific and Engineering Research.
- A.M. Goyal (2013), "Impact of capital Structure on performance of listed public sector banks in India", International Journal of Business and Management Invention.
- Dr.G.S. Popli and Mr. Gajendra Kumar Jaiswal (2012),"Determinants of corporate capital structure of Indian industries', Delhi School of Professional Studies and Research.
- Prof.Dr. Sandeep Goel (2011),"Capital Structure Analysis In Indian heavy industry the pecking order dimension", International Journal of Human Resource Management and Research.
- Ashok Panigrahi (2010), "Capital Structure of Indian Corporate: Changing Trends", Asian Journal of Management Research.
- Basudeb Guha-Khasnobis & Saumitra N. Bhaduri (2002), "Determinants of capital Structure in India (1990-1997): A Dynamic panel Data Approach", Journal of Economic Integration.
- SumitraDas and Malabika Roy "Inter-Industry differences in capital structure: The evidence from India"
- Dhananjaya K and Krishna Raj "Market Value and Capital Structure: A study of Indian manufacturing firms" The Institute of Social and Economic Change, Bangalore.