# Study on Capital Structure: Evidence from Selected Pharmaceutical Companies in India

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## Abstract

There is a significant relationship between efficient capital structure and growth of an organization. Capital structure what is the result of different components which included in forming capital of inorganization. Usually, organization mobilize the capital into shares and debentures. Combinations of these components are known as capital structure. But there should be an efficient policy in establishing Capitals of an organization. Otherwise which leads disturbance to cash flow and liquidity of an organization in the future and also it leads to bankruptcy. The Capital Structure of selected pharmaceutical companies are considered in this analysis, which supports to augment the efficiency of an organisation. The manufacturing industry is a significant contributor to GDP growth this industry is major contributor. The period of the study has been significant in the growth and performance of the manufacturing sector due to liberalisation and globalisation. To achieve the corporate objective of maximization of wealth of shareholders, every industry should maintain sufficient profit. The result of the study will definitely help companies, their policymakers, lending Institutions Government and Academies to evaluate the performance and growth of an organisation.

## Keywords

Cash Flow, Profitability, Liquidity Capital Structure, Bankruptcy.

## Introduction

Capital structure can be termed as the equity and the Debt combination in the financial set up of a firm. The expected financial sources is decided by the finance manager or the firm they decide from which source the fund can be generated and the company is going to utilize it for the expansion and the growth of the company. capital structure main aim is to know the risk level of company. There is huge factor that impact on capital structure they are Risk, size of company, nature of company, interest coverage, growth etc. Where capital structure can be sourced from two sources they are owners fund that is shareholders fund and borrowed fund for the optimum capital structure the company uses the best mix of various sources of capital includes equity capital, preference capital and retain capital and in borrowed funds there will debt, long term loan and public deposits. Capital structure of an organization plays major role in profitability and also it has direct impact on the financial structure of an organization.

## Profile of the Company

**Cipla:** It is one of the Indian companies which is in the line of production and manufacture of pharmaceutical. The Cipla company is headquarters located in Mumbai, India it was founded in the year 1935. Cipla mainly concerned with the production of pharmaceuticals related to respiratory, weight control, depression etc.

**Sun Pharma:** It is the fourth largest company that is specialized with generic pharmaceutical The Cipla company is headquarters located in Mumbai, India and it was founded in the year 1983. It is the number one in India.

## Literature Review

**1) Rajesh Pathak (2011)** has done the study on “Capital structure and firm performance evidence from Indian manufacturing firms”. The study has done with the relationship between capital structure and leverage here the percentage of that the companies used as its financial source the debt of the company is going to have a negative impact on performance and it is also one of the major factors that affect the performance of the firms. According to the researcher they have done the study and from their study which for such a negative impact is the high rate of debt in the countries which is developing come with comparison to the developed countries.

**2) Dr. T Velnampy and J alloy Niresh (2012)**, has done their study on the relationship between capital structure and profitability: The researcher states that there is an impact on capital structure on profitability of company and optimal capital structure. It helps to get a better profitability of a company. Their study was to examine the impact of debt and equity planning whether to increase or decrease the debt or to go with the long term or short-term borrowings.

**3) Dr M Shekar miss M. Gori, MS G. Ramya (2014)** in their research, “A study on capital structure and leverage of Tata Motors Limited its role and future prospectus” In the in their study the researchers have found that the capital structure will negative or positive impact as per the financial decisions how the company raise the capital and the use of the best mix used in raising the capital is very important. If company comes up an any wrong decision regarding to capital structure it directly affects the financial health of company. I am still search you have discussed the factors that effect on capital structure that is the growth management style and financial flexibility they have used secondary data that is financial statement Tata Sky about 10 years have been chosen for the study.

**4) Anshuhunoo (2014)** has come up with the “The study on determinants of capital structure in India” That the study is done on 870 listed Indian company that is they have considered both private company and public company the study shows that the factors like profitability, growth, cost of debt, tax has effect CT on leverage of a company.

**5) Kolluru Sarthak Chandra, CS Uday Kumar (2018)** has try to understand the Impact of capital structure on performance evidence from India”. In this study the research you have try to say that it true that the effect of financial gearing has no influence on fiscal performance of a company with regards to wholesale trading manufacturing company they have taken about 2121 wholesale trading and manufacturing companies and they have done an empirical study by using panel data and they have reviewed the capital structure and the performance of company through their study the paper your says that there is no such effect on structure and financial performance of a company with regards to wholesale trading and manufacturing companies.

**6) Nariender Pal Singh, Mahima Bagga (2019)** has tried to analyze ‘‘The Effect of Capital Structure on Profitability: An Empirical Panel Data Study”. Show the researcher tries to study most important factor for any financial manager to decide whether that or equity and its ratio alt for an optimum capital structure proportion on the profitability and the rate of return as well positive effect on capital structure of an company it is crucial to decide the perfect ratio which has an impact on the capital structure does other study says that it is very important to decide the perfect ratio to have positive impact on the capital structure.

**7) Revendranath Tirumalsety & Anjula Gurtoo (2019)**, they have tried to study on ”Financial sources, capital structure and performance of social Enterprises: empirical evidence from India” In this study the researcher have done their examination using panel data technique for about 141 Indian companies the capital structure has a significant effect on companies age assets turnover ratio and company size the study is based on energy sector of India.

**8) Raiyani Jagdish R., (2011)** "The Impact of Financial Risk on Capital Structure Decisions in Selected Indian Industries: A Descriptive Analysis". Study mainly focuses on financial which has direct impact on capital structure and of the company try to understand the capital structure taking a selected Indian industry into consideration the study is me hand financial risk involved in the firm has attempted to analyze the Capital structure and firm performance empirical study from India.

**9) Saurabh Chanda, Anil k. Sharma (2015)** They have done a study regarding the "Capital structure and firm performance: empirical evidence from India". The study is your done on the effect of leverage performance of a company they have done a detailed study by using 422 Indian manufacturing company which are listed on Stock Exchange they have used financial standalone data for their study to understand the effect of capital structure.

**10) Anindita Chakrabarti, Ahindra Chakrabarti 2019**, in their research they have understand "Capital structure puzzle evidence from Indian energy sector" researcher tries to find out the key factor which has done set on capital structure of an organization but connection to energy sectors of India they have used 141 energy sectors companies which operates in India they have done an empirical study using panel data technique for the analysis of the data and the outcome of this paper was the company's age, company's size, company's liquidity please key which effects on companies capital structure study states that the profitability that and non-death factors like tax tangibility ratio has no such effect on capital structure but the researcher you have restricted their studies results restricted for only two largest sectors of India and it does not impact on other sectors.

## Statement of the Problem

In accounting, profit is the difference between total revenue and total expenses over a period of time. Profit is driving force to achieve the objectives of the enterprises. The profitability and efficiency of the enterprise is measured through its profit with the objective of maximizing the profit, a firm mobilizes, coordinate and combines all the factors of production. Profit reflects the result of past decision. It indicates the performance of management. The highest profitability rate ensures the maximization of the wealth. Profitability ratio is useful in analyzing the profitability of firm in the present study. Profitability ratio is based on sales, assets, capital employed and net worth are calculated and analyzed.

## Objectivity of the Study

To analyze efficiency of pharmaceutical companies in term of capital structure of Cipla and sun pharmaceutical.

## Hypothesis

**H0**: "Capital Structure has a positive impact on the financial performance of selected pharmaceutical companies"

## Methodology

Financial ratios are mean to understand the financial ability and weaknesses of a firm. Based on the objective of study, profitability ratios have been used to determine the financial viability of an organization. Study is conducted based on the data from annual reports published by the company cash flow statement helps the researcher to analyses the efficiency of an organization.

Analysis of the data collected for the study has been made by using ratio analysis and other statistical tools namely measure of central tendency in the form of average (X), measure of dispersion (Sigma) and c.v, "one-way t- test" is applied to test of the prove the selected hypothesis.

The present study based on 5 years annual report between March 2014 and March 2018 it highlights only the selected pharmaceutical companies in India which is Cipla and Sun Pharma.

## Operational Definition

- **Debt equity ratio:** this ratio is the result obtained from dividing a firm debt by the firm's shareholders equity. It is debt by equity of a firm. (Debt by Equity).
- **Current Ratio:** This ratio can be obtained from dividing firms' current assets over firm's current liability.
- **Quick assets:** It's also called liquid test ratio where it is calculated to know the capability of an organization to settle-off all its short-term obligation by making use of the firm's liquid asset, cash. (Current Assets-Stock by current liabilities).

- **Total debt to owner's fund:** It is the ratio which is calculated by dividing company's total debts over company's shareholders fund. It is which company is funding its operation from debt by company's shareholders fund of a firm. (Total debt by total Equity).
- **Debtor turnover ratio:** it is ratio used to measure how effectively the firm is providing debt and also how effectively is collecting back the credit provide by the firm, and also to know the firm ability in making use of its assets (Net cr sales by average accounts receivables).
- **Investment turnover ratio:** The ratio which is calculated to know the capability of the firm to produce the income with a particular amount of investment and it also compares the income produced by the firm to its liabilities and the equity.
- **Fixed asset turnover ratio:** this ratio which is calculated to understand usage of fixed assets to generate the sales in optimum way (Sales by average net fixed asset)
- **Proprietary ratio:** it is called as equity ratio it is calculated to know the relation between the shareholders equity over the asset of the firm. (Proprietary fund by total asset)
- **IC- "Interest Coverage" ratio:** To measure the firm ability to pay the interest obligation on the firm's debt by using their EBIT.
- **GP Ratio:** To compare the" linear relationship" between 'gross profit' and 'total sales'

**Table 1.1**

| RATIOS | STANDARD RATE |
|---|---|
| Debt equity ratio | 2:1 |
| Total debt to owner's fund | 1 to1.5 |
| Inventory turnover ratio | 4-6 times |
| Debtor turnover ratio | 7times;12 months |
| Investment turnover ratio | 2:1 |
| Fixed asset turnover ratio | Within10 |
| Proprietary ratio | .50 (or) more |
| Interest coverage ratio | 6-7 times |
| Gross profit ratio | 20-25% |
| Current ratio | 2:1 |
| Quick ratio | 1:1 |

## Analysis and Interpretation

- Debt equity ratio of Cipla is 1.2396 (mean) and sun pharma is 1.2973 (mean) from this We can know from that the shareholders of Cipla company have properly utilized the outsiders fund and the outsiders fund is more than the shareholders fund. Cipla company is having favorable condition than the to the sun pharma company.

- Total debt to owner's fund of Cipla is.1712(mean) and sun pharma is (mean).25884 it indicates that the Cipla company's is not having favourable condition but compared to sun pharma, sun pharma is having high ratio.
- Inventory turnover ratio of Cipla is 3.1152(mean) and sun pharma is 5.6229 (mean). sun pharma has higher ratio than Cipla but it is having little below the standard ratio it is having a condition where inventory is managed satisfactorily.
- Debtor turnover ratio of Cipla is 5.516(mean) and sun pharma is 4.2228(mean) here Cipla is comparatively having good one and the firm is efficiently managing the debtors of the firm. The sun pharma is having less than the standard ratio
- Investment turnover ratio of Cipla is 2.7682(mean) and sun pharma is 77.86758 (mean). Sun pharma has higher ratio than Cipla.
- Fixed asset turnover ratio of Cipla is 2.7682 (mean) and sun pharma is 2.18772(mean) Cipla company higher ratio and it is having a satisfactory and sun pharma is having lesser comparatively to Cipla.
- Proprietary ratio of Cipla is.978(mean) and sun pharma is.76322(mean) here the Cipla company is having higher the ratio, the relationship of the owner's fund to the total assets and the shareholders having better long-term solvency position of the company. Sun pharma is also having higher than the standard or the idle ratio.
- Interest coverage ratio of Cipla is 59.796(mean) and Sun pharma is 30.4696 (mean) interest coverage ratio is a measure to know whether company is capable to pay interest on debt and the higher ratio indicates the good financial health. Repayment of debt leads to reduction of the interest amount. Here sun pharma is having better position to pay off its interest liability compared to the Cipla company.
- Gross profit ratio of Cipla is 19.2914 (mean) and Sun pharma is 17.413 (mean) the Cipla company is having little bit lesser but it is a satisfactory ratio the firm is having efficient production and a good price for their product, sun pharma is having lesser than the standard ratio it is an indicator to the firm to improve its efficiency, fixation of price for their product.
- Current ratio of Cipla is 3.3506(mean) and sun pharma is 2.211 (mean). Here Cipla has higher current ratio and it been having high current ratio that indicates that firm is having high liquid the current assets are more than the current liability and also the higher margin of safety has ability to pay its current liability in time when they become due. It is favourable condition to the company.
- Quick ratio of Cipla is 1.4456(mean) and sun pharma is 2.211 (mean). it indicates that the firm is having liquid and has greater ability and it is a favourable condition for the

company. Sun pharma is having liquid and has greater ability and it is a favourable condition than the Cipla Company.

**Table 1.2 Summary of Analysis of "One Sample T Test"**

| | Cipla | | | | Sun pharma | | | |
|---|---|---|---|---|---|---|---|---|
| Companies / Variables | **Mean** | **t-value** | **Sig** | **Std error** | **Mean** | **t-value** | **Sig** | **Std error** |
| **Debt equity ratio** | 1.239600 | 54.134 | .00 | .0228989 | 1.29730 | 130.992 | .00 | .009904 |
| **total debt to owner's fund** | .171200 | 19.724 | .00 | .0086799 | .25884 | 13.965 | .00 | .018535 |
| **Inventory turnover ratio** | 3.115200 | 30.574 | .00 | .1018898 | 5.62298 | 3.318 | .02 | 1.694692 |
| **debtor turnover ratio** | 5.516400 | 77.158 | .00 | .0714945 | 4.22288 | 6.083 | .00 | .694191 |
| **Investment turnover ratio** | 2.191200 | 32.635 | .00 | .0671427 | 77.86758 | 3.252 | .03 | 23.941296 |
| **Fixed asset turnover ratio** | 2.768200 | 25.659 | .00 | .1078830 | 2.18772 | 18.221 | .00 | .120064 |
| **Proprietary ratio** | .978000 | 42.474 | .00 | .0230261 | .76322 | 23.052 | .00 | .033108 |
| **Interest coverage ratio** | 59.796400 | 1.617 | .18 | 36.97744 | 30.46962 | 1.056 | .35 | 28.851465 |
| **Gross profit ratio** | 19.291400 | 15.538 | .00 | 1.241525 | 17.41300 | .914 | .41 | 19.056768 |
| **current ratio** | 3.350600 | 19.572 | .00 | .1711948 | 2.21166 | 4.276 | .01 | .517250 |
| **quick ratio** | 1.445600 | 24.022 | .00 | .0601794 | 1.58574 | 3.301 | .03 | .480400 |

**Source: Computed**

The analysis has been done by taking the different ratios such Debt equity ratio, Total debt to owner's fund ratio, inventory turnover ratio, debtor turnover ratio, fixed asset turnover ratio, investment turnover ratio, interest coverage ratio, gross profit ratio, current ratio, quick ratio. Debt equity Ratio of Cipla company is having favourable condition than the Sun pharma company. Total debt to owner's fund of Cipla company's is.1712(mean) than Sun pharma. Fixed asset turnover ratio of Cipla company higher ratio and it is having a satisfactory ratio 2.768200(mean) of the company to maintain the financial health of the firm. Inventory turnover ratio of sun pharma has higher ratio 3.318(mean) than Cipla it is having a condition where inventory is not effectively maintained up to the mark by maintaining good financial setup. Debtor turnover ratio of Cipla is comparatively lesser ()having good one and the firm is efficiently managing the debtors in prompt collection of debts in time. Proprietary Ratio of Sun pharma is also having higher.978000(mean) than the standard they possess long-term solvency position of the company. Interest coverage ratio of sun pharma has better 59.796400 (mean) ratio as sun pharma is able to pay off its interest liability but not by Cipla company. Gross profit ratio of Sun Pharma is having lesser19.2914 (mean) but it is a satisfactory ratio the firm has efficient production and a good price for their product. Current ratio of Cipla has higher value and that indicates that firm is having high liquid balance. Quick ratio of Sun pharma has greater ratio they have higher ability has they can convert cash easily in a shorter span of time.

## Conclusion

The variable coefficient of Interest Coverage ratio of Cipla pharma company has a positive impact on the selected dependent variables. A servicing capacity of the pharma company affects its profitability. A ‘t’ test has been applied to find whether the Interest Coverage Ratio has significant effect on the Cipla and Sun Pharma companies. This test has shown that all the ratios except gross profit ratio are affected by Interest Coverage Ratio.

T value of all the ratio of Cipla is not greater than the significant value that show independent variable of interest coverage ratio which is not influenced on other dependent variable which helps to maintain the financial stability of company, when its compared with the Sun Pharma the T value of Cipla has not reached the significant value that indicates that independent variable have no significant influence on other ratios.

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