

CAPITAL STRUCTURE AND ITS IMPACT ON PROFITABILITY & LIQUIDITY: A STUDY OF LISTED PHARMACEUTICAL INDUSTRY IN INDIA

¹PRIYADHARSHINI.R, ² DR.SUNIL VAKAYIL,

¹Research Scholar, ²Director
RVSIMSR,

¹RVS Institute of Management and Research, Coimbatore-14, India

Abstract: Capital structure means a proportion of debt and equity, so their combination is the important issue for the industries while they estimate the amount of required capital. Industries should be more careful in deciding the investing methods and formulating the investing strategy and profitability. This study seeks to examine the relationship between the capital structure and profitability & Liquidity of pharmaceutical industries in India. The reference period of the study is five years (2013-2017) and is completely based on secondary data collected from various sources.

Keywords: Capital, Profitability, Debt and Equity, Liquidity.

INTRODUCTION

The Indian pharmaceutical industry is front rank of India's Science based industries with wide- ranging capabilities of drug manufacture and technology. The pharmaceutical industry in India is the third rank in terms of quality, technology and medicine manufactured. The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. It has expanded drastically in the last two decades. The leading 250 Pharmaceutical Companies control 70 percent of the market with market leader holding nearly 7 percent of the market share. It is an extremely fragmented market with severe price competition and government price control.

The Indian pharmaceutical sector is highly fragmented with more than 20,000 registered units. It has expended drastically in the last two decades. The pharmaceutical industry in India is an extremely fragmented market with severe price competition and government price control. The pharmaceutical industry in India meet around 70% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals and injectibles. There are approximately 250 large units and about 800 small scale units. Which from the core of pharmaceutical and with the patents Act in 1970. However, economic liberalization in 90's the Prime Minister P.V.Narashima Rao and then finance minister Dr. Manmohan singh enabled the industry to become what it is today. This patent act removed composition patents from food and drugs, and through it kept process patents, these were shortened to period to five to seven years.

HISTORY OF PHARMACEUTICAL INDUSTRY

India Allopathic medication was started in British rule. But production of such medicines was not in the country. Foreign countries use to make the final products in their units using the raw materials imported from India and exported those medicines to India again. It was 1982 when few of the Indian scientists like P C Ray, T K Gajjr, and A S Koti bhaskar laid a foundation for a pharmaceutical industry. In 1901 Acharya P C Ray started first Indian Pharmaceutical Industry, Bangal Chemical in Calcutta. Within few years some more Indian entrepreneurs came forward to form the pharmaceutical industries. In 1907 Alembic Chemical Works in Baroda, in 1919 Bengal Immunity were started. This was considered as a foundation of Indian pharmaceutical industry. This initial achievement of drug industry could meet 13% of countries medicinal requirement. During the Second World War (1939 -1945) there was a huge fall in supply of drugs from foreign companies. As a need number of pharmaceutical companies started in India. This includes Unichem, Chemo Pharmaceuticals, Zandu Pharmaceutical work, Calcutta Chemicals, Standard Chemicals, Chemical Industrial and Pharmaceutical Laboratories (Cipla), East India Pharmaceutical Works etc. With the establishment of such new pharmaceutical industries before independence, almost 70% of the countries requirement was achieved.

REVIEW OF LITERATURE

1. Shalini R- "an empirical study on the capital structure decisions of select pharmaceutical companies in India" that examines how BSE and NSE affect the pharmaceutical sectors in India. Firm specific factors such as tangibility, size of investment, liquidity, profitability and business risk have been analyzed to know about that selected companies.

2. Dr.C.D.Bbalaji capital structure of select pharmaceutical companies operating in India – an analysis this study interpreted that to know about the growth and development of the pharmaceutical sectors.

3. Chette srinivas yadav –Determinants of the capital structure and financial leverage: evidence of selected Indian companies” concluded that to know about the financial leverage and determinates of the companies. Determinates are profit, value of assets, growth, size, tax rate and etc.

4. R.Amsaveni , S.Gomathi “Determinants of capital structure: a study of the pharmaceutical industry in India” that examines how the proportion of debt and equity measured by gearing or leverages.

5. Dana-Maria boldeanu “The analysis of the influence factors affecting the performance of pharmaceutical companies” this study interpreted that the return on equity plays the important role in pharmaceutical sectors and measure that factors which contribute to its changes

OBJECTIVES

The main objective of the study is to find out the financial position of listed pharmaceutical companies in India.

1. To study the growth and development of pharmaceutical companies.
2. To analyze profitability and liquidity status of pharmaceutical companies.

HYPOTHESIS

H0: There is no significant relationship between profitability and selected variables.

H1: There is a significant relationship between profitability and selected variables.

RESEARCH METHODOLOGY

The data of the study completely collected from the secondary data through various websites and annual financial reports of the listed industries in pharmaceutical sectors. The reference period of this study is five years from 2013 to 2017. The listed 5 industries are selected from the listed companies by using Random sampling technique.

In order to achieve the set objectives of the study, the researchers have employed Ratio Analysis. These ratios are employed so as to confirm the relationship between capital structure and profitability.

EXPLANATORY VARIABLES CONSIDERED FOR STUDY

1. DEBT-TO-EQUITY RATIO

The debt-to-equity ratio shows the proportion of equity and debt of a firm using to finance its assets, and the ability for shareholder equity to fulfill the obligations to creditors in the event of a business decline.

$$\text{Debt - to - Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Stockholders' Equity}}$$

$$\text{Another Version of Debt Equity Ratio} = \frac{\text{Total Borrowings}}{\text{Stockholders' Equity}}$$

$$\text{Financial Leverage Multiplier} = \frac{\text{Total Assets}}{\text{Stockholders' Equity}}$$

(If > 1, debt used)

2. DEBT-TO-ASSET RATIO

The debt to assets ratio indicates the proportion of a company's assets that are being financed with debt, rather than equity. The ratio is used to determine the financial risk of a business. A ratio greater than 1 shows that a considerable proportion of assets are being funded with debt, while a low ratio indicates that the bulk of asset funding is coming from equity.

$$\text{Total Debt To Total Assets} = \frac{\text{Short Term Debt} + \text{Long Term Debt}}{\text{Total Assets}}$$

3. RETURN ON CAPITAL EMPLOYED RATIO

Return on capital employed (ROCE) is a financial ratio that measures a company's net profitability and in the denominator is the sum of shareholders' equity and debt liabilities; it can be simplified as (Total Assets – Current Liabilities)

ROCE = Earnings Before Interest and Tax (EBIT) / Capital Employed

DATA ANALYSIS AND INTERPRETATION**1. CIPLA**

Year	Debt Equity Ratio (DR)	Debt Asset Ratio (DAR)	Return on Capital Employed (ROCE)	Net Profit
2013	0.11	1	16.33	3.72
2014	0.09	1	13.21	3.28

Correlations

		DER	DAR	ROCE	NP
DER	Pearson Correlation	1	. ^a	.652	.178
	Sig. (2-tailed)		.	.234	.775
	N	5	5	5	5
DAR	Pearson Correlation	. ^a	. ^a	. ^a	. ^a
	Sig. (2-tailed)	.	.	.	.
	N	5	5	5	5
ROCE	Pearson Correlation	.652	. ^a	1	-.507
	Sig. (2-tailed)	.234	.		.383
	N	5	5	5	5
NP	Pearson Correlation	.178	. ^a	-.507	1
	Sig. (2-tailed)	.775	.	.383	
	N	5	5	5	5

a. Cannot be computed because at least one of the variables is constant.

INTERPRETATION

2015	0.12	1	10.17	5.64
2016	0.09	1	11.90	3.40
2017	0.03	1	7.47	4.34

It is interpreted from the above table that Debt Equity ratio has positive correlation (.775) with the profit, Debt asset ratio has low positive correlation and also it is noted that Return on Capital Employed ratio has positive correlation (-.507) with profit.

2. Dr. Reddy's Pharm

Year	Debt Equity Ratio (DR)	Debt Asset Ratio (DAR)	Return on Capital Employed (ROCE)	Net Profit
2013	0.20	1	15.98	3.56
2014	0.29	1	18.59	4.48
2015	0.29	1	14.25	5.94
2016	0.27	1	10.61	5.07
2017	0.20	1	11.35	4.49

Correlations

		DER	DAR	ROCE	NP
DER	Pearson Correlation	1	. ^a	.261	.712
	Sig. (2-tailed)		.	.672	.177
	N	5	5	5	5
DAR	Pearson Correlation	. ^a	. ^a	. ^a	. ^a
	Sig. (2-tailed)	.	.	.	.
	N	5	5	5	5
ROCE	Pearson Correlation	.261	. ^a	1	-.317
	Sig. (2-tailed)	.672	.		.603
	N	5	5	5	5
NP	Pearson Correlation	.712	. ^a	-.317	1
	Sig. (2-tailed)	.177	.	.603	
	N	5	5	5	5

a. Cannot be computed because at least one of the variables is constant.

INTERPRETATION

It is interpreted from the above table that Debt Equity ratio has positive correlation (.712) with the profit, Debt asset ratio has low positive correlation and also it is noted that Return on Capital Employed ratio has positive correlation (-.317) with profit.

3. SUN PHARM

Year	Debt Equity Ratio (DR)	Debt Asset Ratio (DAR)	Return on Capital Employed (ROCE)	Net Profit
2013	0.01	1	16.81	7.50
2014	0.33	1	13.43	7.38
2015	0.24	1	13.89	7.72
2016	0.26	1	13.34	6.92
2017	0.23	1	18.02	5.27

Correlations

		NP	DER	DAR	ROCE
NP	Pearson Correlation	1	-.458	. ^a	-.862
	Sig. (2-tailed)		.438	.	.060
	N	5	5	5	5
DER	Pearson Correlation	-.458	1	. ^a	-.050
	Sig. (2-tailed)	.438		.	.936
	N	5	5	5	5
DAR	Pearson Correlation	. ^a	. ^a	. ^a	. ^a
	Sig. (2-tailed)	.	.	.	.
	N	5	5	5	5
ROCE	Pearson Correlation	-.862	-.050	. ^a	1
	Sig. (2-tailed)	.060	.936	.	
	N	5	5	5	5

a. Cannot be computed because at least one of the variables is constant.

INTERPRETATION

It is interpreted from the above table that Debt Equity ratio has positive correlation (.812) with the profit, Debt asset ratio has low positive correlation and also it is noted that Return on Capital Employed ratio has positive correlation (.236) with profit.

4. GLENMARK

Year	Debt Equity Ratio (DR)	Debt Asset Ratio (DAR)	Return on Capital Employed (ROCE)	Net Profit
2013	0.12	1	14.64	6.43
2014	0.12	1	14.48	6.67
2015	0.07	1	19.35	4.19
2016	0.11	1	20.13	3.66
2017	0.29	1	17.79	3.03

Correlations

		NP	DER	DAR	ROCE
Profit	Pearson Correlation	1	-.148	. ^a	-.649
	Sig. (2-tailed)		.812	.	.236
	N	5	5	5	5
Dr	Pearson Correlation	-.148	1	. ^a	-.582
	Sig. (2-tailed)	.812		.	.303
	N	5	5	5	5
DAR	Pearson Correlation	. ^a	. ^a	1	. ^a
	Sig. (2-tailed)	.	.		.
	N	5	5	5	5
ROC E	Pearson Correlation	-.649	-.582	. ^a	1
	Sig. (2-tailed)	.236	.303	.	
	N	5	5	5	5

a. Cannot be computed because at least one of the variables is constant.

INTERPRETATION

It is interpreted from the above table that Return on Capital employed ratio has positive correlation (.936) with the profit, Debt asset ratio has low positive correlation and also it is noted that Debt equity ratio has positive correlation (.234) with profit.

5.LUPIN

Year	Debt Equity Ratio (DR)	Debt Asset Ratio (DAR)	Return on Capital Employed (ROCE)	Net Profit
2013	0.11	1	24.29	3.95
2014	0.02	1	31.67	4.69
2015	0.00	1	25.64	9.25
2016	0.03	1	23.05	5.94
2017	0.04	1	20.55	5.17

Correlations

		DER	DAR	ROCE	NP
DER	Pearson	1	. ^a	-.272	-.716
	Correlation				
	Sig. (2-tailed)		.	.658	.174
DAR	N	5	5	5	5
	Pearson	. ^a	. ^a	. ^a	. ^a
	Correlation				
ROCE	Sig. (2-tailed)	.	.	.	.
	N	5	5	5	5
	Pearson	-.272	. ^a	1	-.039
NP	Correlation				
	Sig. (2-tailed)	.658	.	.950	.950
	N	5	5	5	5
NP	Pearson	-.716	. ^a	-.039	1
	Correlation				
	Sig. (2-tailed)	.174	.	.950	.950
NP	N	5	5	5	5

a. Cannot be computed because at least one of the variables is constant.

INTERPRETATION

It is interpreted from the above table that Return on Capital employed ratio has positive correlation (.950) with the profit, Debt asset ratio has low positive correlation and also it is noted that Debt equity ratio has positive correlation (.174) with profit.

FINDINGS

- ✓ The Debt Equity Ratio has high positive correlation with profit in companies like Cipla, Dr. Reddy's Pharm, Lupin and has low positive correlation with Sun pharm & Genmark.
- ✓ The Debt Asset Ratio has high positive correlation with profit in companies like Sunpharm and has low positive correlation with Cipla, Dr. Reddy, Genmark and Lupin.
- ✓ The Return on capital employed Ratio has high correlation with profit in companies like Sunpharm, Genmark, Lupin and has low positive correlation with Cipla and Dr.Reddy.

From this study contributed the capital structure has highly positive correlation with profit in the dependent variable is Return on capital employed Ratio and other variables are low positive correlation.

CONCLUSION

From this paper it would be concluded that there would be significant relation between capital structures on profitability of Pharmaceutical companies in India. If the companies maintain ideal capital structure its helps to generate more profit. By studying Capital structure and profitability of 5 Pharmaceutical companies in India, it is that found there is a relationship between profitability and selected variables. So the alternative hypothesis (H1) is accepted and the null hypothesis (H0) is rejected.

REFERENCES

- [1] Shalini R- An Empirical Study on the Capital Structure Decisions of Select Pharmaceutical Companies in India Volume 19, Issue 5. Ver. II (May. 2017)
- [2] Dr.C.D.Balaji -Capital Structure of Select Pharma Companies Operating in India Volume 4, Issue 4 (2013)
- [3] Chette Srinivas Yadav -Determinants Of The Capital Structure And Financial Leverage: Evidence Of Selected Indian Companies Vol: I Issue Xii, April 2014
- [4] R.Amsaveni, S.Gomathi "Determinants of Capital Structure: A Study of the Pharmaceutical Industry in India" Volume 6 Issue 3 march 2012.
- [5] Dana-Maria BOLDEANU "The analysis of the influence factors affecting the performance of pharmaceutical companies" Volume 21, 2014
- [6] www.moneycontrol.com
- [7] www.financial.com