

FINANCIAL PERFORMANCE ANALYSIS OF PHARMACEUTICAL INDUSTRY IN INDIA

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Abstract: The financial assessment of a company has been the topic of debate among policy leaders as administrators, planners, economists and research workers for several years. It is a method of calculating the effects of monetary policies and activities of a company. Financial performance review shall involve the examination and evaluation of the financial results in such a manner as to allow a complete diagnostic of the viability and financial soundness of the company. This study is based upon the 5 Pharma companies i.e., Sun Pharmaceutical Industries Ltd., Dr. Reddy's Laboratories Limited, Cipla Limited, Lupin Limited and Aurobindo Pharma Limited were selected for the study with the period of study from March 2016 to March 2020. The ANOVA analysis result revealed that there is a significant difference in the Profit of the selected pharmaceutical companies during the period of study.

Keywords: Financial Performance, Pharmaceutical Companies, ANOVA analysis, India.

INTRODUCTION

The financial performance of any company is important for not only its own future but for all the stakeholders including the investors, loan providers, creditors, debtors and community at large. The Financial performance is traditionally linked with the capital structure of the company. "Companies have capital structures that include debt capital, equity capital, and working capital for daily expenditures. Individuals hold capital and capital assets as part of their net worth. How individuals and companies finance their working capital and invest their obtained capital is critical for growth and return on investment" (Honig, 1998¹). The financial assessment of a company has been the topic of debate among policy leaders as administrators, planners, economists and research workers for several years. It is a method of calculating the effects of monetary policies and activities of a company. Financial performance review shall involve the examination and evaluation of the financial results in such a manner as to allow a complete diagnostic of the viability and financial soundness of the company.

The Financial performance review for any company involves, the examination and evaluation of the financial results in such a manner as to allow a complete diagnostic of the viability and financial soundness of the company. This research analyzes the effect of the capital structure on the valuation of selected pharmaceutical firms in India. These businesses differentiate between high capital investment on R&D and a long period of time between original researches and, finally, the selling of a drug. Once a pharmaceutical medication hits the market, the firm must determine how high the premium the company would be looking for to deliver a fair return on its investment in the shortest amount of time. The industry of their country has improved well in recent past. It is well known that the pharmaceuticals industry is one of the keys to earning foreign currency. Thus, the study is relevant that it could inform the major Pharma companies about the financial areas to be improved upon and in which area they need to concentrate for improving their performances and finally improve the image of the Indian Pharms industry and medicines in the world. The growth of the pharma Companies is presented in the next section as under:

Growth of Indian Pharma Industry

By 2025, the Indian pharma industry is anticipated to reach USD100 billion, while demand for medical equipment is expected to reach US\$25 billion. India's pharma exports were worth US\$ 16.3 billion in fiscal year 2020. Products exported by the pharmaceutical industry include bulk drugs and pharmaceutical intermediates as well as prescription components. The value of Indian pharmaceutical exports was US\$ 13.87 billion by October 2020. India exported medicines for 16.28 billion USD in financial year 2020 and 2.07 billion US\$ in the month of October 2020 (Saini & Bansal, 2018²). The biotechnology industry in India, which encompasses pharmaceuticals, bio-services, agriculture, manufacturing, and information technology, is forecast to increase at a pace of roughly 30% per year. The industry is anticipated to be valued more than \$100 billion by 2025. In 2019, the domestic pharmaceutical business in India earned sales of Rs 1.4 lakh crore (20.03 billion US\$), a 9.8 percent rise from Rs. 129.015 crore (US\$ 18.12 billion) in year 2018. (Itumalla & Acharyulu, 2012³).

In India, the pharmaceutical sector is regarded as an important component of the country's healthcare industry, which is estimated to be worth Rs. 10,000 crores by 2020. Through 2020, generic drugs will have 70 percent market share, led by over-the-counter medicines 21 percent and proprietary medicines 9 percent market share (Singh et.al., 2012⁴). Bearing in mind the surge in the pharmaceutical industry, several features of the Indian industry must not be disregarded, including the fact that it is mainly unorganised and fragmented in nature. It has around 25,000 companies, with just 330 of them being organised. In 2016, complete job seekers with B. Pharma degrees represented for 42.3 percent of total applications, up from 40.62 percent in 2015. According to India Capability Study statistics, the entire purpose of employment for women in the pharmaceutical and healthcare industries is

around 38.67 percent, while overall employability of women is only approximately 28.28 percent, emphasising the need of preserving gender parity in business (Saini & Bansal, 2018⁵).

As the growth and potential of Indian Pharma Industry is very high the current research work measures the financial performance analysis of pharmaceutical industry in India.

Reviews of literature

Dzelu, R. C. (2019)⁶ from 2007 to 2016 on the financial performance of pharmaceutical, listed firms at Stock Exchange of Ghana. He research indicated that Long-Term Debt to Capital Ratio significantly affected all performance measures except ROA, which was also severely impacted. In general, capital structure and performance correlated negatively. Moreover, bigger companies are more profitable. The report advised that the Ghana Revenue Authority (GRA) increase corporate tax collection since over 40% of the loan portfolio of selected enterprises was tax delinquent. Also, corporations should cut debt, employ more equity, and increase overall assets.

VHung, C. Y., Albert, C. P. C., & Eddie, H. C. M. (2002)⁷ evaluated the financial performance of Hong Kong property developers and contractors. Contractors are frequently modest and less lucrative than huge indigenous local developers. Contractors have more gears than developers, according to statistics. But it doesn't mean they borrow more. They may borrow less than developers if they have assets as collateral. Their high debt to equity ratio reveals a small equity base. A lack of profit margins means their equity expenditures are almost double developers'. Regression analysis of the data verifies this. Less profit margins but more capital gearing is connected to assets. The study then considers the impact of the developer-contractor profit disparity on their competitiveness.

It is the developing world's leading maker of low-cost generic drugs, and the Indian pharma sector is the world's major producer. With most pharmaceuticals ready for export and the most permitted pharmaceutical production facilities, India is poised to replace the United States as the world leader in pharmaceutical exports in the near future. The local pharma industry in India is projected for a rise by nearly 20 percent to \$26 billion in 2014 and is anticipated to hit almost \$50 billion in 2020 (Singh & Yadav, 2009⁸).

It is apparent that various internal forces are to blame for India's burgeoning pharmaceutical business. Since 2008, year-on-year growth has been promising, with an incremental increase of \$1-1.5 billion every year. The United Kingdom is the largest consumer of Indian pharmaceutical exports, followed by the United States. Many of India's top 50 domestic pharmaceutical companies are driving this increase in value and volume. The pharma sector in India is expected to grow to USD 48 billion by 2017-2018, with a 14 percent CAGR (Jithendranathan et.al., 2000⁹).

Exports account for a significant share of the industry's total sales. There are more than 200 countries that India exports pharmaceutical items to. "Pharma Vision 2020," a strategy plan published by the Indian government, intends to establish India as a global leader in the production of pharmaceuticals from beginning to finish. Demand is predicted to be strong in both the local and foreign sectors.

R&D considerations play a crucial position in the pharmaceutical sector, as a substantial portion of the sales relies on research & development. Business invests its main revenue on R&D investment as soon as the testing of a new product has been carried out, gains may be booked for the future (Joseph, 2012¹⁰). However, in many ways, prescription industries are highly nuanced. Significant public-sector contributions to basic biomedical R&D influence private firms' judgments on what to do and how actively to participate in R&D. Private-sector R&D returns are generally favourable, although they vary greatly from drug to pharmaceutical. The majority of the public's hunger for prescription drugs is handled by professionals and insurance companies (Bediet.al., 2013¹¹).

Before new treatments may be commercialised, they must undergo costly and time-consuming testing. In contrast, it might take hundreds of millions of dollars to develop a ground-breaking new treatment that would subsequently be manufactured for a few pennies per dose and the price of the medicine would have no clear relationship to either component. The expenses of development and manufacturing vary substantially from one experimental drug to the next. These expenses are determined by the kind of medicine produced, the chance of failure, and whether the medicine is based on a novel molecular entity (NME) or a steady improvement of an old drug. The expenditure for research and development per NME has grown significantly in current years, for a variety of reasons (Joseph, 2012¹²).

Jouida, S. (2018)¹³ examined the interplay between diversity, capital structure and profitability. Previous empirical investigations ignored the relationship's dynamics, endogeneity and causation. To solve these econometric issues concurrently, I built a present value of actual return for 412 French financial firms spanning 10 years. After controlling the individual fixed effects, there is some evidence of reverse causation. Also, profitability is inversely related to leverage and diversity. The link between diversification and leverage is not stable, but the three elements are. The forecast error variance decompositions validate the endogenous variable of diversification. Impulse response functions reveal important dynamic financial interrelationships. Their results hold up across multiple activity and geographic variables (Entropy and Herfindahl-Hirschman index).

Dinova, R. D. K., & Herawati, A. (2019)¹⁴ sought to assess the impact of ROA, DER, and Price-By-Volume (PBV) on pharmaceutical firm stock returns. Phenomena investigation on sub pharmaceutical sector since pharmaceutical business stock returns have fallen compared to other subsectors in recent years. This study aimed to determine the impact of ROA, DER, and PBV on the return of stock in firms. The analysis utilises yearly data from 2015 to 2017 description causality study.

Suyono, S., Sudarno, S., Suhardjo, S., Sari, Y., & Purnama, I. (2020)¹⁵ sought to determine the impact of price to book value on capital structure and profitability of Indonesian health and pharmaceutical industries from 2012 to 2019. The research included 12 businesses in the health and pharmaceutical sub-sector in Indonesia from 2012 to 2019. Purposive sampling was used for the sample. The sample criteria matched 8 firms. This research employed descriptive and SEM analysis using AMOS 21. From 2012 to 2019, the PBV variable has a favourable and considerable impact on the capital structure of Indonesian health and pharmaceutical firms.

From 2012 to 2019, PBV had no substantial impact on health and pharmaceutical company profits in Indonesia. From 2012 to 2019, capital structure had no substantial impact on health and pharmaceutical company profitability in Indonesia.

RESEARCH METHODOLOGY

Sampling: Sampling is the process of obtaining information about an entire population by examining only a part of it. It incorporates population and sampling unit, determining the sampling techniques, and sampling size.

Population: A population is the aggregate of all the elements that share some common set of characteristics and that comprise the universe for the purpose of the research problem. The universe of present study consists of all Pharma companies, who are working in India.

Sample unit: 5 Pharma companies i.e., Sun Pharmaceutical Industries Ltd., Dr. Reddy’s Laboratories Limited, Cipla Limited, Lupin Limited and Aurobindo Pharma Limited were selected for the study.

Sample size: The study includes 5 pharma companies with the period of study are from March 2016 to March 2020.

Sampling Technique: In present research, the respondents were selected using convenience sampling from 5 organisations. The sample of the present study represented the population as it is having a major share in the Indian medicine market.

The Secondary data: It was collected through Annual report of the selected pharma companies with Books, Journals, Research papers, and case–study, Websites, Articles. The use of internet was also of great help to the researcher as various search engines namely google.com, Online Directories like Google Scholar websites also proved very helpful where researcher found a good repository of international research papers.

Data analysis Tool: data gathered from the annual report of the selected companies were analysed with the statistical tool of with ANOVA.

Data Analysis

The data gathered from the selected companies were analysed in two steps. In first step the correlation is measured between profitability and capital structure. For this purpose the SPSS software is used with the following hypothesis:

The Profitability of the selected companies is measured and presented as under:

Table-1
Total Profits of the Selected Companies (Rs. in Crore)

	Mar.-16	Mar.-17	Mar.-18	Mar.-19	Mar.-20
Sun Pharma Limited	5,656.86	7,836.30	2,633.79	3,209.32	4,186.79
Dr. Reddy’s Laboratory Limited	2,107.70	1,257.20	912.4	1,906.20	1,969.90
Cipla Limited	1,395.44	1,042.41	1,419.35	1,509.61	1,546.98
Lupin	2,264.60	2,556.38	254.83	611.73	-273.72
Aurobindo Pharma	2,022.14	2,296.17	2,419.77	2,361.80	2,844.69

Source: Annual reports and Accounts

Table 1 and Figure 1 revealed that the Profits of the company Sun Pharma has shown a fluctuating trend as it has decreased from the Rs.5656.86 in 2016 to Rs.4186.79 crore in 2020. The Profits of the Dr. Reddy’s lab has also shown a fluctuating trend from Rs.2107.70 in 2016 to Rs.1969.9 Crore in 2020 although after 2018 it has shown increasing trends. For company Cipla the Profits has shown a continuously increasing trend from year 2017 with Rs. 1042.41 to Rs.1546.98 crore in 2020. For the company Lupin the Profits trend were fluctuative as it has decreased from Rs. Rs.2264.60 crore in 2016 to Rs.-273.72 crore (Loss) in year 2020. For last company Aurobindo the Profits trend is showing a high and constant increase with the level of 2016 with Profits of Rs.2022.14 crore, it has increased to Rs.2844.69 crore except in the year 2019. This means that the Profits of the company Aurobindo Pharma has shown the best performances during the period of 2016 to 2020.

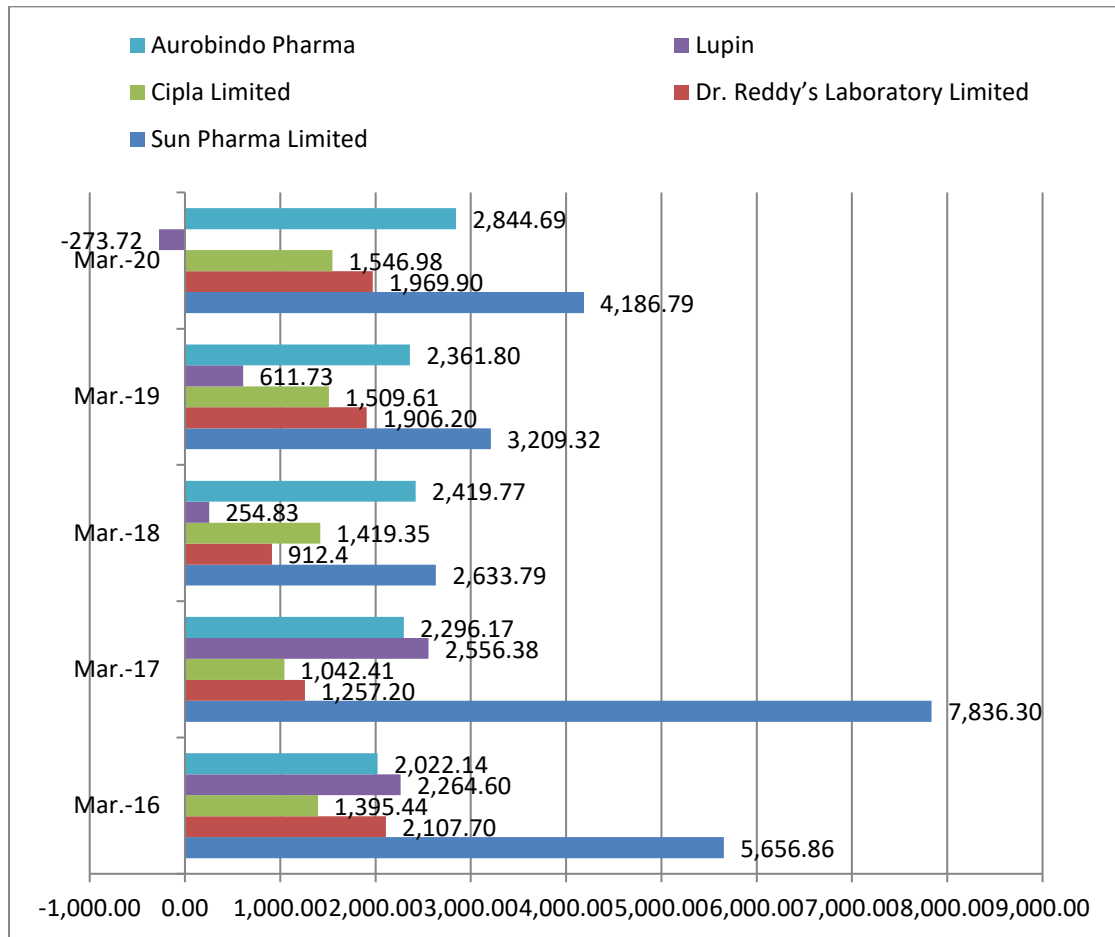


Figure-1: Total Profits of the Selected Companies

Further to compare the changes in the Profit of the selected companies following hypothesis is developed:

H_0 : There are insignificant differences in the Profit of the selected pharmaceutical companies during the period of study.

To analyse the above hypothesis the ANOVA tool is used with SPSS software to measure the differences in the selected pharmaceutical companies and to measure that which company has the highest Profit significantly higher than other companies. The results of the test are provided as under:

Table-2
ANOVA analysis for Profits

Descriptive						
	N	Mean	SD	SE	Mini mum	Maxi mum
Sun Pharmaceuticals Ltd.	5	4704.61	2092.04	935.59	2633.79	7836.30
Dr. Reddy's Laboratory Ltd.	5	1630.68	518.15	231.72	912.40	2107.70
CiplaLtd.	5	1382.75	200.24	89.55	1042.41	1546.98
LupinLtd.	5	1082.76	1256.55	561.94	-273.72	2556.38
Aurobindo Pharma Ltd.	5	2388.91	296.87	132.76	2022.14	2844.69
Total	25	2237.94	1684.71	336.94	-273.72	7836.30

ANOVA					
	SS	df	M S	F	Sig.
Between Groups	42708982.279	4	10677245.570	8.404	.000
Within Groups	25409148.086	20	1270457.404		
Total	68118130.365	24			

The result revealed that group mean vary by a statistically significant value. The sig. level is 0.000, less than 0.05, thus the above null hypothesis is rejected. We therefore accept the alternative hypothesis and revealed that there is a significant difference in the

Profit of the selected pharmaceutical companies during the period of study. The mean value analysis revealed that the mean of Sun PharmaRs. 4704.61crore is the highest and having significant differences from the other companies.

CONCLUSION

This research analyses the effect of the capital structure on the valuation of selected pharmaceutical firms in India. These businesses differentiate between high capital investment on research and development (R&D) and a long period of time between original researches and, finally, the selling of a drug. Once a pharmaceutical medication hits the market, the firm must determine how high the premium the company would be looking for to deliver a fair return on its investment in the shortest amount of time. The industry of our country has improved well in recent past. It is well known that the pharmaceuticals industry is one of the keys to earning foreign currency. Thus, the study is relevant that it could inform the major companies about the areas to be improved upon and how and in which area they need to concentrate for improving their performances and finally improve the image of the Indian industries and medicines in the world.

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