



# AN ANALYSIS OF PROFITABILITY OF SELECTED INDIAN PHARMACEUTICAL COMPANIES

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## ABSTRACT

With more than 20,000 registered units the Indian Pharmaceutical sector is highly fragmented. India's pharmaceutical industry meets about 70 per cent of the country's demand for bulk medicines, pharmaceutical ingredients, additives, pills, capsules, orals, and injection. There are two major things coming out, first, Indian Pharmaceutical Industry is increasing in production, value, volume, number of units-steadily and resembling the entire Indian Economy growth story. Second, the very fundamental pharmaceutical market structure in India is undergoing a big change. By issuing the patent ordinance, as of 1 January 2010, India fulfilled a WTO promise to accept international product patents, the culmination of 10-year process. The Indian Pharmaceutical manufacturers will not be able to produce patented drugs in this new scenario, which they have been doing for a long time through another method. This study was conducted for critical evaluation of Indian pharmaceutical industry. Since 2014-10 to 2018-19, the research duration is 10 years to evaluate and compare the profitability performance of leading pharmaceutical firms.

**KEYWORDS:** Pharmaceutical, Financial Performance, Profitability, Indian

## INTRODUCTION:

The Indian pharmaceutical market is 3rd largest in terms of volume and 13th largest in terms of value, as stated by equity master in a pharmaceutical sector analysis survey. The market is largely dominated by marketed generics that make up about 70 to 80% of the industry. Consolidation has become increasingly a significant feature of the Indian pharmaceutical industry, perceived to be a highly fragmented sector.

In the pharmaceutical sector India has achieved an eminent global place. There is also a large pool of scientists and engineers in the country who have the ability to take the industry to very high levels.

The UN-backed Medicines Patents Pool has signed six sub-licenses with Aurobindo, Cipla, Desano, Emcure, Hetero Labs and Laurus Labs, allowing them to launch Tenofovir Alafenamide (TAF), a generic anti-AIDS drug for 112 developing countries.

## MARKET SIZE

According to India Ratings, a Fitch Group firm, the Indian pharmaceutical industry is expected to expand at a compound annual growth rate (CAGR) of 20 per cent over the coming five years. Indian pharmaceutical establishments registered with US Food and Drug Administration (FDA) as on March 2019 was the highest at 523 for any country outside the US.

As indicated by a recent Centrum Broking survey, we expect the domestic pharmaceutical market to rise at 10-12 per cent in FY15 compared to 9 per cent in FY14. The growth rate of domestic pharmaceuticals in October 2019 was 11.9 per cent, the study stressed.

In November 2019, Gujarat clocked the highest growth rate on the pharmaceutical sector at 22.4%, surpassing the growth rate of the industry, which expanded by 10.9%, according to market research firm AIOCD Pharma softtech AWACS. Moreover, that at an average rate of about 20 per cent, India's biotechnology industry comprising bio-pharmaceuticals, bio-services, bio-farming, bio-industry, and bioinformatics could cross the US\$ 7 billion mark by the end of FY15, according to an industry body. Biopharma is the largest sector contributing about 62 per cent of total sales, with revenue generation in excess of Rs 12,600 (US\$ 2,03 billion) crore. The biopharmaceutical field includes vaccines, therapies and diagnostics.

## INVESTMENTS:

The Union Cabinet has approved amending the current FDI policy in the pharmaceutical sector to include medical devices. Under the automatic path, the Cabinet has approved FDI to produce medical devices subject to specified conditions up to 100 per cent.

According to data released by the Department of Industrial Policy and Promotion (DIPP), the drugs and pharmaceuticals industry attracted cumulative foreign direct investment (FDI) in inflows worth US\$ 12,813.02 million between April 2000 and December 2019.

## ROAD AHEAD:

The size of the Indian pharmaceutical market is projected to increase to USD 85 billion by 2020. Indian domestic market growth would be driven by increasing consumer spending, rapid urbanization, and expanded health insurance, etc.

In the future, higher domestic revenue growth will depend on companies' ability to match their drug portfolio with chronic disease therapies such as cardiovascular, anti-diabetes, anti-depressants and anti-cancers.

In fact, the government has taken a range of cost-effective steps to reduce healthcare costs. Governments are therefore focused on timely marketing of generic drugs. Indian pharmaceutical firms will benefit from this too. However, the focus on rural health services, lifesaving medicines, and preventive vaccinations also bode well for pharmaceutical companies.

## LITERATURE REVIEW:

Indian Pharmaceutical Industry Profitability Analysis is a specific field of research therefore not a very common topic to write on. There are various articles and research papers published for India's Competitiveness and Pharmaceutical Industry, but nothing is especially applicable to this report.

The present thesis is a specific research work that is under review for selected companies and for a specified duration. Aside from the financial study, there are other technical points included. They are the network of TRIPS, WTO, Patent Regime, diverse national and foreign pharmaceutical manufacturers.

The researcher has referred Keshab Das's work on TRIPS and its political ramifications to get the insights into the matter. Professor Robert Tancer has served as a gateway for investment in the Indian Pharmaceutical Industry. Robert Warren has worked in the pharmaceutical business.

Same kind of research was done at the same university before a long 16-year gap. The thesis was emphasized by Dr. Shashi A. Jain in the year 1990 on working capital management, entitled "Pharmaceutical Industry Working Capital Management in India." The research attempted to examine the working capital structure of the selected pharmaceutical companies in depth for a period of time.

Dr. Akhileshwar Sharma carried out another major research work in May 1992 on the subject "Profitability Review of Drugs and Pharmaceutical Companies in India." This research attempted to find out the role of profitability of various selected units during that span of time using several parameters.

But the above study took place in the scenario when economy was in a closed state. The measures for liberalization by privatisation and globalization were introduced by India's then Prime Minister Lt. Shri Narsimha Rao, and then a gradual change was seen in India's economy.

With the WTO agreement and market de-regulation and the enforcement of the Patent Act a dramatic shift is observed in India's pharmaceutical industry making the backdrop for the report.

There is a lot of information available from the internet about the industry at national and international level, and it can be accessed through different search engines.

#### RESEARCH OBJECTIVE:

1. To study various ways to measure the profitability of selected pharmaceutical companies.
2. To identify any relationship in-between companies in the various measures of profitability
3. To study the pharmaceutical industry of India

#### RESEARCH METHODOLOGY:

##### Sources of Data:

Secondary sources of data will be utilised for this proposed research study

Secondary data have been collected from Company Annual Reports.

##### Universe:

In the research study selected 14 Pharmaceutical companies.

##### Period of Data Coverage:

Ten years of financial statements will be analysed for Pharmaceutical companies taken under study.

##### ANALYSIS OF DATA:

The proposed statistical tools for the analysis of data are ratio analysis and ANOVA test.

#### DATA ANALYSIS:

##### Gross Profit Margin Ratio

| COMPANY                                       | 2019    | 2018    | 2017    | 2016   | 2015   | 2014    | 2013   | 2012   | 2011   | 2010   |
|-----------------------------------------------|---------|---------|---------|--------|--------|---------|--------|--------|--------|--------|
| Alembic Ltd                                   | 12.99   | 3.25    | -13.94  | -3.96  | 5.10   | 7.79    | 11.46  | 14.96  | 16.19  | 14.23  |
| Ambalal Sarabhai Enterprises Limited          | -104.55 | -175.47 | -72.83  | -32.45 | -32.79 | -187.61 | -74.13 | -29.81 | -29.52 | -7.05  |
| Cadila Healthcare Ltd                         | 13.82   | 14.79   | 10.10   | 10.95  | 17.91  | 17.13   | 15.04  | 14.41  | 6.82   | 3.12   |
| Coral Laboratories Limited                    | 17.27   | 14.95   | 15.59   | 13.76  | 16.54  | 12.91   | 12.69  | 22.29  | 25.30  | 15.92  |
| Dishman Pharmaceuticals & Chemicals Limited   | 27.90   | 27.27   | 24.44   | 17.10  | 27.41  | 31.35   | 20.95  | 23.75  | 21.80  | 25.21  |
| Gujarat Terce Laboratories Ltd.               | 2.15    | 0.81    | 0.56    | 3.21   | 4.08   | 2.84    | 3.25   | 4.10   | 2.80   | 2.55   |
| Gujarat Themis Biosyn Limited                 | 16.73   | 5.80    | -38.90  | -15.90 | 2.24   | -14.76  | -0.07  | -85.77 | -3.50  | 4.36   |
| Lincoln Pharmaceuticals Limited               | 7.87    | 7.22    | 6.53    | 6.04   | 8.35   | 8.03    | 9.81   | 8.11   | 6.91   | 7.71   |
| Sun Pharma Advanced Research Company Limited. | 17.91   | -23.09  | -252.19 | -16.46 | -62.97 | -34.47  | -12.32 | -      | -      | -      |
| Sun Pharmaceuticals Industries Ltd            | -       | -       | -       | -      | 9.86   | 0.79    | 6.01   | 26.73  | 27.81  | -      |
| Themis Medicare Limited                       | 7.39    | 2.32    | -15.68  | 6.34   | 6.25   | -0.03   | 7.73   | 8.05   | 1.31   | 8.84   |
| Torrent Pharmaceuticals Limited               | 29.16   | 21.96   | 17.01   | 19.36  | 24.28  | 19.34   | 19.40  | 17.55  | 16.45  | 16.03  |
| Unjha Formulations Ltd.                       | 1.60    | 1.89    | 1.45    | 2.63   | -0.51  | 5.15    | -0.49  | -9.93  | -53.16 | -18.11 |
| Zenith Health Care Ltd.                       | -15.23  | -7.67   | -2.84   | -      | -      | -       | -      | -      | -      | 7.27   |

Based on the above charts and graph it can be observed that during the years 2014, 2017 and 2018, Drug companies have negative value. In the earlier years of the start-up of pharmaceutical firms this ratio was high, and then in subsequent

years this ratio fell significantly, which seems to have high COGS costs relative to sales produced in middle-age years compared with recent years. COGS prices are significantly rising compared with revenues from 2015-11 to 2017-13.

#### ANOVA

| Source of Variation | SS        | df  | MS        | F         | P-value   | F crit    |
|---------------------|-----------|-----|-----------|-----------|-----------|-----------|
| Between Groups      | 94894.76  | 13  | 7299.5969 | 8.3081718 | 1.529E-11 | 1.8077229 |
| Within Groups       | 99282.306 | 113 | 878.60448 |           |           |           |
| Total               | 194177.07 | 126 |           |           |           |           |

Thus,  $F_{cal} > F_{tab}$  and  $p$ -value is less than specified  $\alpha$  of 0.05.

So, null hypothesis is rejected and it is concluded that the difference is seen in

Gross Profit Margin Ratio of selected pharmaceutical companies.

##### Net Profit Margin

| COMPANY                                       | 2019   | 2018   | 2017    | 2016   | 2015   | 2014   | 2013   | 2012    | 2011   | 2010   |
|-----------------------------------------------|--------|--------|---------|--------|--------|--------|--------|---------|--------|--------|
| Alembic Ltd                                   | 17.42  | 6.06   | -9.58   | -6.24  | 2.01   | 0.65   | 11.18  | 10.00   | 12.31  | 9.86   |
| Ambalal Sarabhai Enterprises Limited          | -99.78 | -48.47 | -24.26  | -2.63  | 3.58   | 16.60  | -11.61 | -30.62  | -5.87  | -8.18  |
| Cadila Healthcare Ltd                         | 11.04  | 10.21  | 12.26   | 15.34  | 13.64  | 10.30  | 11.06  | 12.73   | 11.04  | 10.39  |
| Coral Laboratories Limited                    | 15.12  | 14.04  | 13.82   | 12.48  | 13.39  | 9.51   | 8.41   | 18.43   | 20.98  | 10.07  |
| Dishman Pharmaceuticals & Chemicals Limited   | 16.39  | 12.67  | 9.43    | 9.21   | 19.38  | 21.97  | 16.93  | 21.74   | 20.33  | 18.56  |
| Gujarat Terce Laboratories Ltd.               | 0.83   | 0.23   | 0.13    | 1.15   | 0.69   | 0.16   | 1.11   | 0.37    | 0.12   | 0.64   |
| Gujarat Themis Biosyn Limited                 | 14.89  | 3.73   | -44.72  | -24.03 | -6.93  | -28.49 | -10.99 | -101.53 | -14.27 | -4.38  |
| Lincoln Pharmaceuticals Limited               | 5.44   | 5.01   | 2.79    | 3.25   | 4.87   | 3.82   | 5.24   | 4.84    | 4.41   | 4.09   |
| Sun Pharma Advanced Research Company Limited. | 17.12  | -25.30 | -244.40 | -14.47 | -62.53 | -25.93 | -13.00 | -       | -      | -      |
| Sun Pharmaceuticals Industries Ltd            | -94.65 | 19.35  | 38.94   | 41.91  | 33.99  | 31.43  | 31.01  | 26.69   | 25.85  | 24.78  |
| Themis Medicare Limited                       | 0.87   | -5.36  | -24.73  | 4.35   | 8.39   | -5.02  | 5.05   | 5.01    | 3.42   | 5.38   |
| Torrent Pharmaceuticals Limited               | 22.41  | 18.85  | 14.16   | 16.39  | 14.30  | 15.51  | 15.56  | 12.63   | 9.41   | 10.66  |
| Unjha Formulations Ltd.                       | 1.86   | 1.83   | 1.37    | 2.62   | -1.24  | 3.95   | -8.16  | -15.57  | -58.43 | -21.99 |
| Zenith Health Care Ltd.                       | -8.04  | 0.20   | 0.28    | 5.87   | 4.75   | 0.56   | -3.07  | -0.27   | 3.55   | 1.54   |

Trend Zigzag can be seen from the charts and tables above. This percentage shows how much money the organization retains from the sales generated as net income. The higher the ratio suggesting that the company holds more sales as net profits, on the opposite, it can be assumed that the company has no future project

where it would need investment or want to display more profit and offer shareholders dividend. The financial condition of Pharma companies for the year 2010 is very strong while the financial position of 2017 is lowest ever.

## ANOVA

| Source of Variation | SS        | df  | MS        | F         | P-value   | F crit    |
|---------------------|-----------|-----|-----------|-----------|-----------|-----------|
| Between Groups      | 40185.211 | 13  | 3091.1701 | 4.3967559 | 4.501E-06 | 1.8005194 |
| Within Groups       | 86476.013 | 123 | 703.05702 |           |           |           |
| Total               | 126661.22 | 136 |           |           |           |           |

Thus,  $F_{cal} > F_{tab}$  and  $p$ -value is less than specified  $\alpha$  of 0.05.

So, null hypothesis is rejected and it is concluded that the difference is seen in Net Profit Margin Ratio of selected pharmaceutical companies.

**CONCLUSION:**

In the earlier years of the start-up of pharmaceutical firms, the gross profit margin ratio was high, and then in subsequent years this ratio drops drastically, which seems to have high COGS costs relative to sales produced in the middle age from years to years. The COGS prices decline significantly compared to the 2015-11 to 2017-13 revenues. The financial position of Pharma companies in 2010 is very strong while 2017 has the worst financial position ever.

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