



# Financial Predictors Influencing the Ranking of Indian Pharmaceutical Companies 2016

Harishankar Sahu, Naresh Mali, Vrinda Mathur

MBA Pharmaceutical Management, School of Pharmaceutical Management, The IIHMR University, Jaipur, India

## Email address:

dr.herry76@gmail.com (H. Sahu)

## To cite this article:

Harishankar Sahu, Naresh Mali, Vrinda Mathur. Financial Predictors Influencing the Ranking of Indian Pharmaceutical Companies 2016. *International Journal of Accounting, Finance and Risk Management*. Vol. 1, No. 1, 2016, pp. 39-45. doi: 10.11648/j.ijafirm.20160101.16

**Received:** September 10, 2016; **Accepted:** November 19, 2016; **Published:** December 20, 2016

**Abstract:** The Indian Pharma industry is on a robust growth path and is likely to be in the top 10 global markets in value term by 2020. Indian pharmaceutical sector accounts for about 2.4 percent of the global pharmaceutical industry in value terms and 10 percent in volume terms and it is expecting to expand at a Compound Annual Growth Rate of 15.92 per cent to US\$ 55 billion by 2020. By 2016-17, India is expecting to be the third-largest global generic Active Pharmaceutical Ingredient merchant market. This study seeks to describe the status of Indian pharmaceutical companies, their position, ranking, financial status and forecasting of future opportunities based on the financial predictors i.e. Net sales, total share capital net profit, total assets, total income. The ranking of the top 10 companies' changes drastically when they ranked based on total share capital and net profit. The financial stability of the companies can be described as they contribute more in market capitalization but are lagging behind in the ranking based on net profits and total share capital.

**Keywords:** Financial Predictors, Ranking, Indian Pharmaceutical Company, Market Capital

## 1. Introduction

India has always been an important contributor to the global pharmaceutical industry with its large domestic market, impressive growth rate over last few years and due to that, it has become one of the sunrise sectors of the Indian economy. [1]

Pharmaceutical Industry is a swiftly growing industry in the country and India stand among the top five pharmaceutical markets in the world. Indian Pharmaceutical Market having rank three in terms of volume and rank five in terms of value among top markets. From the past few years, the awareness regarding health and hygiene has increased, which has led to increasing in the sale of pharmaceutical products in India. The total revenue generated by pharmaceutical companies in India in the last financial year was more than \$20 Billion, which expected to cross the mark of \$26 Billion by 2016. Pharmaceutical companies produce drugs and vaccines for various domains like cardiology, nephrology, neurology, diabetology, etc.

Indian pharmaceutical industry companies broadly classified as domestic companies and foreign companies. Some of the major players include Sun Pharma,

GlaxoSmithKline, Cipla, Dr. Reddy's Laboratories, and Lupin etc. [2]

### *Key Business Terminologies*

**Total Income** - Revenue may refer to business income in general, or it may refer to the amount, in a monetary unit, received during a period.

**Net Profit** - Often referred to as the bottom line, net profit is calculated by subtracting a company's total expenses from total revenue, thus showing what the company has earned (or lost) in a given period of time (usually one year). It also called net income or net earnings. [7]

**Total Share Capital** - Share capital consists of funds raised by issuing shares in return for cash or other considerations. The amount of share capital a company has can change over time because each time a business sells new shares to the public in exchange for cash, the amount of share capital will increase. Share capital can be composed of both common and preferred shares.

**Total Market Capital** - Market capitalization is the aggregate valuation of the company based on its current share price and the total number of outstanding stocks. It can be calculated by multiplying the current market price of the company's share with the total outstanding shares of the company.

**Total assets** - Total assets refers to the total amount of assets owned by a person or entity. Assets are items of economic value, which are expend over time to yield a benefit for the owner.

**Net Sales**- Net sales are the amount of sales generated by a company after the deduction of returns, allowances for damaged or missing goods and any discounts allowed. The sales number reported on a company's financial statements is a net sales number, reflecting these deductions. [8]

**Net Profit Margin** - Net profit margin is the percentage of revenue left after all expenses have deducted from sales. The measurement reveals the amount of profit that a business can extract from its total sales. The net sales part of the equation is gross sales minus all sales deductions, such as sales allowances. [9]

**Quick Ratio** - The quick ratio is a measure of how well a company can meet its short-term financial liabilities. Also known as the acid-test ratio, it can be calculated as follows:  $(\text{Cash} + \text{Marketable Securities} + \text{Accounts Receivable}) / \text{Current Liabilities}$ .

**Current Ratio** - The current ratio is a liquidity and efficiency ratio that measures a firm's ability to pay off its short-term liabilities with its current assets. The current ratio is an important measure of liquidity because short-term liabilities are due within the next year.

**Cash Ratio** - The cash ratio is the ratio of a company's total cash and cash equivalents to its current liabilities. The metric calculates a company's ability to repay its short-term debt.

**Debt Equity Ratio** - The debt-to-equity ratio (D/E) is a financial ratio indicating the relative proportion of shareholders' equity and debt used to finance a company's assets. Closely relate to leveraging, the ratio known as Risk, Gearing or Leverage. [10]

## 2. Review of Literature

According to article "TOP 10 PHARMA COMPANIES IN INDIA 2016" Published 16 Jan 2016 at Listz Web page: The total revenue generated by pharmaceutical companies in India in the last financial year was more than 20 Billion dollar, which is expected to cross the mark of 26 Billion dollar by 2016.

The article described the scenario of Indian pharmaceutical companies in 2016 along with aranking of top 10 pharmaceutical companies based on their total market capital. According to the literature, Sun Pharmaceutical limited leading company having 1, 89,139 crores till January 2016 and got the first rank followed by sun Pharma another leading company like Lupin Pharmaceuticals, Dr. Reddy, Cipla, Aurobindo, Cadila, Divi's laboratory, GlaxoSmithKline, Glenmark and Torrent got 2<sup>nd</sup> to 10<sup>th</sup> rank respectively. [3]

According to article "Indian Pharmaceutical industry growth intact amid current headwinds faced by industry" Published Jan 2013 at Web page Express Pharma: The Indian Pharma industry is expecting to be among the top 10 global market in value terms by 2020, bolstered by

increasing domestic demand. The Indian Pharma industry stood at Rs 629.0 Billion in FY12, registering year growth of 16 percent and expected to reach around Rs 55 billion by 2020. [4]

According to Article "Pharmaceutical Companies in India" Published at web page Business Maps of India.com: India is the world's third largest pharmaceutical industry in terms of volume and world's 13th largest pharmaceutical industry by value. The top 8 to 10 companies including Sun Pharma, Lupin, Dr. Reddy's Labs and Cipla occupy 70 to 80 percent of the Indian pharmaceutical market space. It has estimated by a Fitch Group company named India Rating that the Indian pharmaceutical industry will grow at a rate of 20 percent during 2015-2020. [5] The domestic market is expecting to do better this time, as the projected growth rate is 10-12 percent during 2015-16 as compared to 9 percent in 2014-15. [6]

## 3. The Significance of the Study

This study helps to all stakeholders who connected to concern Pharma Company can know the status of respective Company.

It can help a pharmaceutical company to understand the need and address the problem, make a foothold through creative marketing to acquire a good market share for their product, make possible strategy to solve the problem so that they improve the performance of the company and predict the future opportunities.

## 4. Objective

- Study the current market scenario of Indian pharmaceutical Industry.
- Identify the different parameters that significantly influence the total market capital of Pharmaceutical Company.
- Ranking the top 10 leading Indian Pharmaceutical Company based on different parameters.
- To forecast, the future sales opportunities of concern pharmaceutical company based on their previous sales data.

## 5. Methodology

The study design was descriptive analysis using secondary data, which were collected from published materials, journals, web pages like Pharma Companies official websites, The economic times, Money Control, Rediffmoneywiz, The Hindu Business line, Business Standard, Wikinvest, Markets. ft, Equity master, Pharmabiz, etc.

The methods of data analysis were both qualitative and quantitative. A quick impressionist summary used where the results were obvious and required no further analysis. Tables, graphs and charts used to present findings where applicable.

## 6. Data Analysis, Findings and Interpretation

### 6.1. Factors Which Significantly Dependent or Influence the Total Market Capital of Respective Pharma Companies

Researcher has used different parameter to check the significant dependency and independency with the Total market capital of Pharmaceutical Company. SPSS and advance excel were used for regression analysis at 95% level of confidence.

**Table 1.** Variables Entered/Removed<sup>a</sup>.

Model	Variables Entered	Variables Removed	Method
1	Net sales, Total Share capital, Net Profit, Total Assets, Total Income <sup>b</sup>	.	Enter

a. Dependent Variable: Total Capital

b. All requested variables entered.

**Table 2.** Model Summary<sup>b</sup>.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.993a	.987	.970	8631.752	.987	59.894	5	4	.001

a. Predictors: (Constant), Net sales, Total Share capital, Net Profit, Total Assets, Total Income

b. Dependent Variable: Total Capital

By using Total Market Capital as dependent variable there were number of factors found which were significantly dependent with the Total Market Capital.

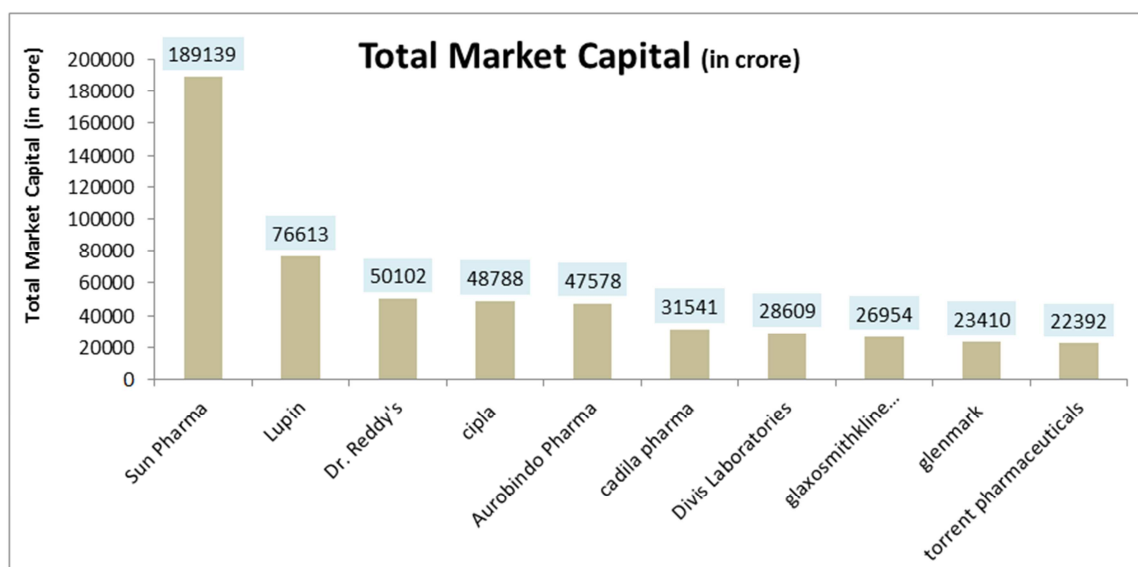
These variable can influence the Total Market Capital, Variables are:

- Net sales,
- Total Share Capital,
- Net Profit,
- Total Assets,
- Total income,

### 6.2. Leading Indian Pharmaceutical Companies in 2016

Researcher scale-up the top 10 Indian Pharmaceutical Companies among the all Market players in Indian Pharmaceutical Industry based on different parameters i.e. Total market capital, Total yearly income, Net sales, Net profit, Share capital and Total Assets.

#### 6.2.1. Based on Total Market Capital



**Fig. 1.** Leading Indian Pharmaceutical Companies based on total Market Capital.

- The Indian Pharmaceutical Industry possesses dynamic characteristics and various companies contribute to the characteristics among which the above-mentioned companies are studied and its amount of contribution to the industry is determined by the graphical figures.
- Sun Pharmaceuticals became largest Pharma Company in India by acquiring Ranbaxy in year 2014. Official data inferred that based on the total market capital in FY 2015-2016, Sun Pharmaceuticals acquires the first rank as compare to others while Torrent

Pharmaceuticals acquires the bottom position in the ranking of top 10 Pharmaceutical companies in India.

- It also inferred that the famous big players i.e. Dr. Reddy, Lupin and Aurobindo Pharma face tough competition from each other in the market and are in a

very close competition in acquiring the rank in the top 10 Pharmaceutical Companies.

### 6.2.2. Based on Net Sales

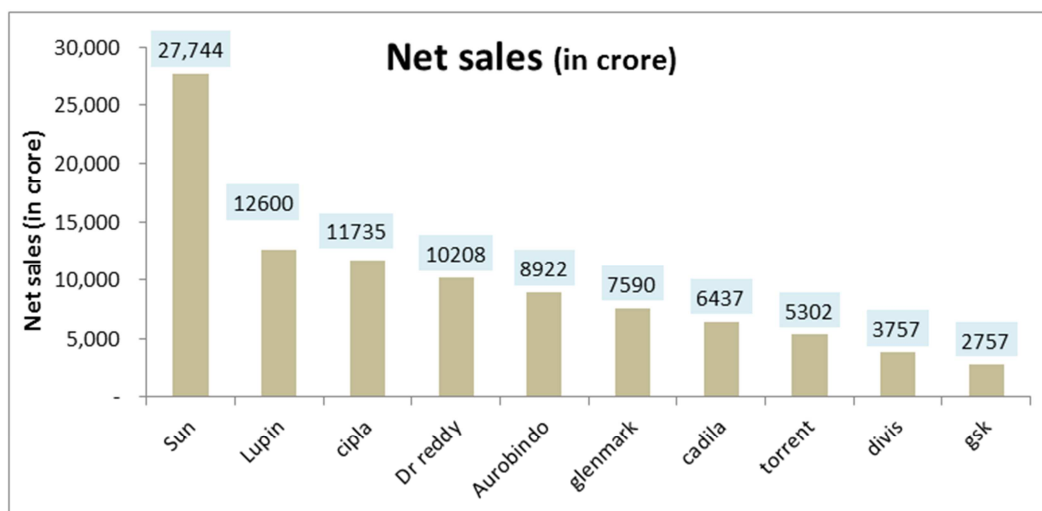


Fig. 2. Leading Indian Pharmaceutical Companies based on total Net sales.

- Sun Pharmaceuticals rated as the leading company in the industry has thrown double sales than the other players in the market.
- Cipla acquires the third position based on the net sales ranking whereas it takes the fourth position in the ranking based on market capital, which shows that wide variety of products range in Respiratory segment

contributes to the increased sales.

- Torrent Pharmaceuticals takes a leap and a jump to acquire the seventh position and GSK takes the last, showing the strong variability in ranking based on net sales v/s ranking based on market capital.

### 6.2.3. Based on Total Yearly Income

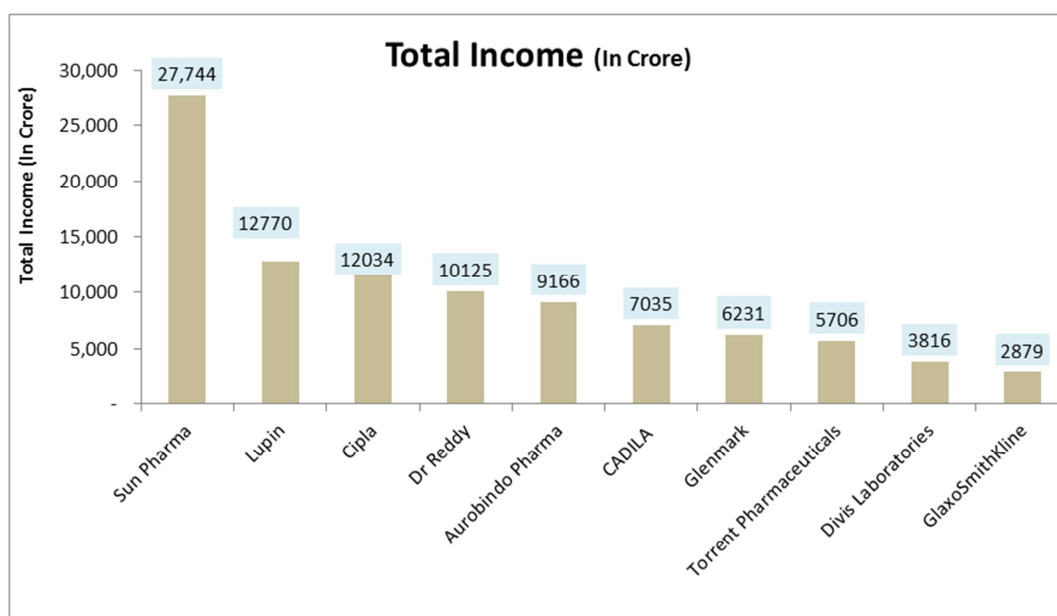


Fig. 3. Leading Indian Pharmaceutical Companies based on total Income.

- In the FY 2015 -2016, since Cipla generated increased sales than Dr. Reddy's, thus, it has more income also; and it shows a marginal difference in the total income of Lupin and Cipla.
- Thus, the ranking shows Cipla taking the third position

in the market. Cipla's portfolio focus is on respiratory, oncology, and anti – infective that accounts for the majority of total income earned and in turn helps Cipla to take lead over Dr. Reddy.

#### 6.2.4. Based on Net Profit

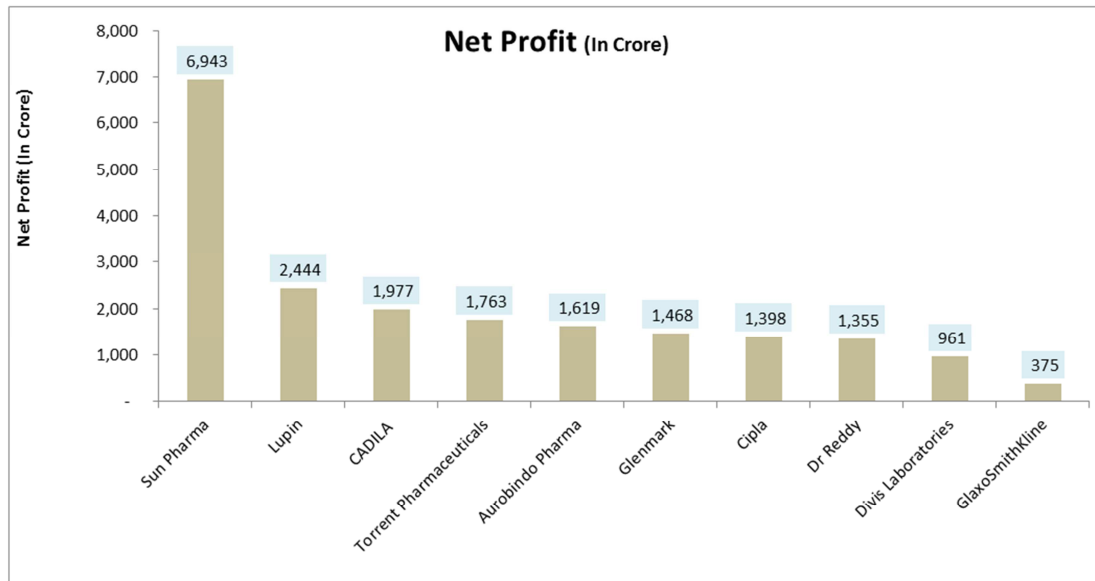


Fig. 4. Leading Indian Pharmaceutical Companies based on total Net Profit.

- The ranking of the companies based on Net profit indicates huge variance and indicates the dynamicity of the strategies adopted by the companies.
- Cadila Pharmaceutical Ltd being fifth or sixth position in the ranking based on market capital, net sales and total income takes a big jump to the third position, and it indicates that Cadila is a profit-oriented company.
- It is inferred from the ranking based on net profit that Cipla takes a back step on the ranking ladder at the

seventh position that indicates the less profit margin of Cipla as compared to other companies. In addition, the investment share of Cipla in R&D expenditure is very significant and thus it has fewer profit margins.

- Torrent Pharmaceuticals jumps to the fourth position from the seventh position, which indicates that the company has significant profit margin.

#### 6.2.5. Based on Total Share Capital

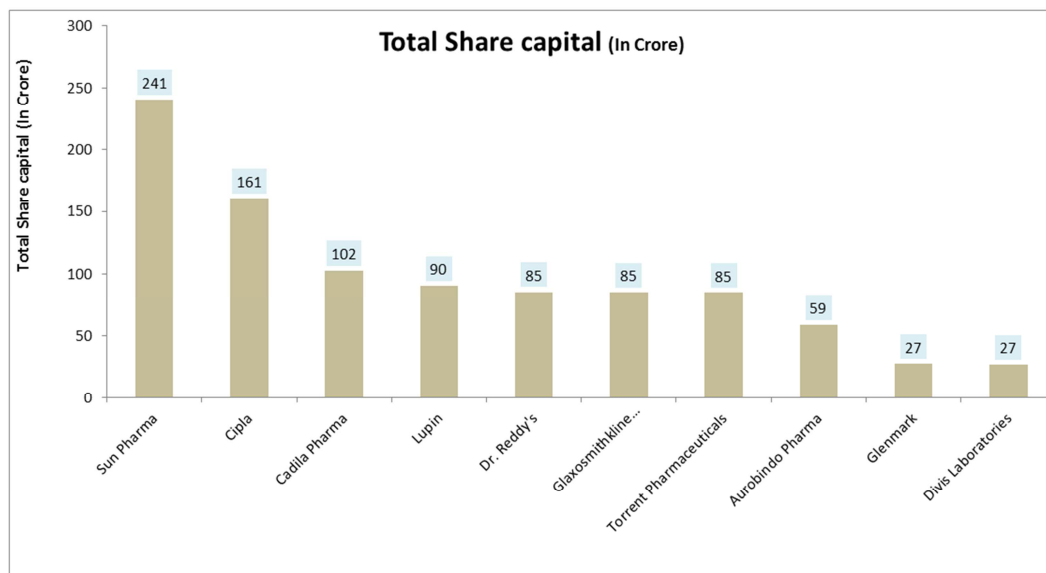


Fig. 5. Leading Indian Pharmaceutical Companies based on total share capital.

- Share Capital indicates the money invested in a company by the shareholders, thus it can be inferred that Cipla and Cadila have more number of shareholder investors and it has good long-term sources of finance.
- GlaxoSmithKline and Torrent Pharmaceuticals takes a jump to the 6<sup>th</sup> and 7<sup>th</sup> position whereas in the other

ranking they had taken the last position, thus it also shows that GlaxoSmithKline and Torrent have good long term sources of finance and greater amount of money has been invested by its shareholders.

### 6.2.6. Based on Total Assets

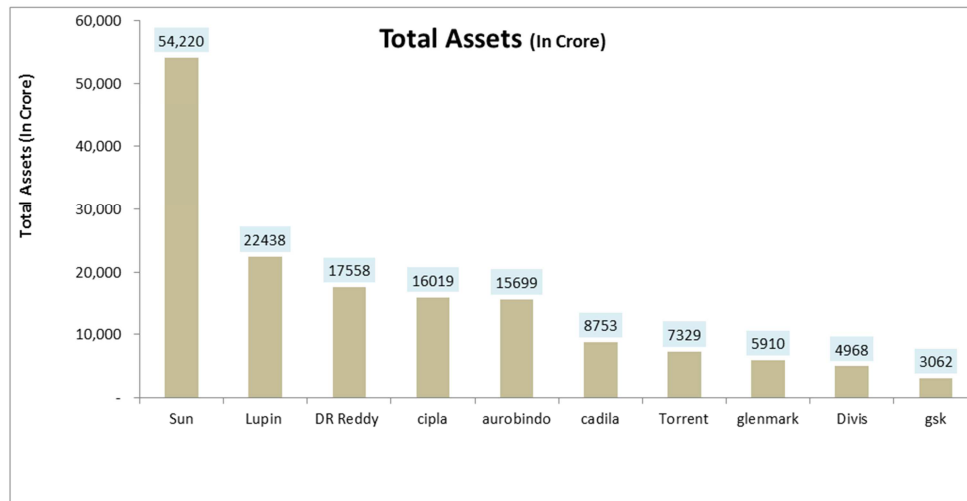


Fig. 6. Leading Indian Pharmaceutical Companies based on total Assets.

- The above ranking, based on the total assets a company has which shows that Sun Pharmaceuticals has good financial position in the market.
- GlaxoSmithKline taking the last rank in the domestic market shows that it has an unstable financial position.

### 6.3. Descriptive Analysis: Sales of Indian Top 10 Pharmaceutical Companies from March 2011-March 2016

Table 3. Descriptive analysis of top 10 Indian pharmaceutical companies.

Particular's	Sun Pharmaceuticals	Lupin	Dr Reddy's	Cipla	Aurobindo
Mean	7813.8	8049.0	8404.2	8667.1	6271.5
Standard Error	4087.1	1224.6	815.8	825.4	828.6
Median	3422.2	8030.9	9081.0	8654.8	6201.2
Standard Deviation	10011.2	2999.7	1998.3	2021.8	2029.5
Sample Variance	100225090.4	8998300.5	3993290.7	4087862.3	4119020.2
Kurtosis	4.9	-0.6	-1.0	-0.5	-2.1
Skewness	2.2	0.4	-0.8	0.4	0.2
Range	25899.1	8104.8	4903.2	5541.4	4840.9
Minimum	1845.1	4494.9	5304.5	6193.8	4081.4
Maximum	27744.2	12599.7	10207.7	11735.2	8922.4
Sum	46882.9	48293.8	50424.9	52002.3	37628.9
Count	6	6	6	6	6

Table 3. Continued.

Particular's	Cadila	Divi's Laboratory	GSK	Glenmark	Torrent
Mean	3738.9	2450.2	2728.9	3094.6	3041.2
Standard Error	655.9	358.5	127.0	835.1	529.3
Median	3282.7	2332.4	2691.7	2209.6	2926.3
Standard Deviation	1606.7	878.0	311.2	2045.5	1296.5
Sample Variance	2581393.3	770947.9	96816.0	4184113.3	1680940.3
Kurtosis	0.3	-0.5	2.3	-1.4	1.4
Skewness	1.1	0.4	1.2	0.9	1.1
Range	4225.2	2434.5	911.7	4902.8	3618.0
Minimum	2211.3	1322.7	2375.9	1210.8	1683.6
Maximum	6436.5	3757.2	3287.6	6113.5	5301.7
Sum	22433.3	14701.1	16373.5	18567.4	18247.1
Count	6	6	6	6	6

- The domestic pharmaceutical companies as Sun Pharmaceutical, Lupin and Cipla performance has greater amount of variance in terms of sales. Year wise most of sales were higher than their mean sales.
- Whereas, Aurobindo Pharmaceuticals, Cipla and Glenmark performance is average and yearly sales were near to average sales.
- Since Dr. Reddy's has good amount of market capital and total assets, still most of the company's yearly sales is less than the mean sales.

#### 6.4. Forecasting of Future Opportunities

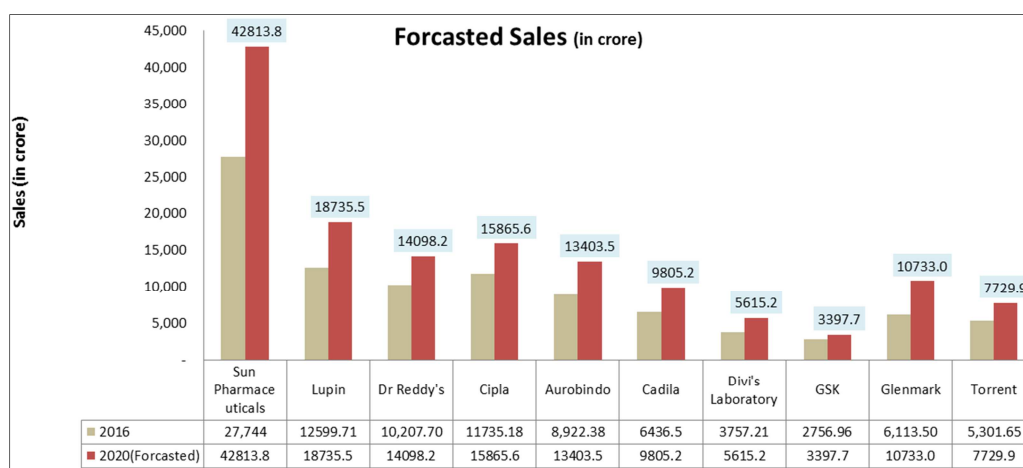


Fig. 7. Forecasted sales of Pharma companies by 2020.

- Sales forecast is an estimate of sales during a specified future period, whose estimate is tied to a proposed marketing plan and which assumes a particular state of uncontrollable and competitive forces.
- The above graph of sales forecasting shows that Sun Pharmaceuticals will almost double its sales and will remain the biggest player in the market with an efficient marketing plan and also taking the lead in the market with tough competition.
- The Industry would face tough competition between the major Indian Companies like Lupin, Dr. Reddy's, Cipla and Aurobindo Pharmaceuticals.
- In addition, the graph indicates that GlaxoSmithKline would not have a significant change in its sales in the year 2020. GSK should have to increase CAGR to increase the sales in coming year and grab the market share in Indian pharmaceutical industry.

## 7. Conclusion

The pharmaceutical industry expected to grow well in the year 2016-2017. The pharmaceuticals industry will grow and corner even more share in the market. India's skilled labor, experience in Pharma and a market hungry for cheap medicine will help the pharmaceutical industry launch new drugs explore new markets while expanding the existing ones.

There exists a variable ranking of the top 10 companies in the Indian Pharmaceutical Industry. Each input variable contributes to a different ranking position of these companies. The ranking of the top 10 companies' changes drastically when they are rank based on total share capital and net profit. The financial stability of the companies can be revealed as they contribute more in market capitalization but are lagging behind in the ranking based on net profits and total share capital.

The understanding of market dynamics and adapting to them quickly is a huge strength that India has. Indian domestic market is engrossed with tough competition and it serves as an opportunistic market to all the pharmaceutical companies.

## References

- [1] Indian Pharmaceutical Industry. (2012). Retrieved July 5, 2016, from Business Maps of India.com: <http://business.mapsofindia.com/pharmaceutical/>.
- [2] Pharma Industry. (2014). Retrieved July 3, 2016, from Shine: <http://info.shine.com/industry/pharma/2.html>.
- [3] Pharmaceutical Companies in India. (2015). Retrieved July 5, 2016, from Business Maps of India.com: <http://business.mapsofindia.com/india-company/pharmaceutical.html>.
- [4] TOP 10 PHARMA COMPANIES IN INDIA 2016. (2016, Jan 16). Retrieved July 4, 2016, from Listz: <http://listz.in/top-10-pharma-companies-in-india.html#ixzz4DF67kTWw>.
- [5] Accounting Tools. (n.d.). Retrieved July 10, 2016, from Accounting tools: <http://www.accountingtools.com/>.
- [6] Dr. Aman Trehan, M. A. (n.d.). Indian Pharma Industry: Trends, Predictions and Challenges. Retrieved July 3, 2016, from Asia-Pacific Biotech News: <http://www.asiabitech.com/18/1801/18010027x.html>.
- [7] Investopedia. (n.d.). Retrieved July 10, 2016, from Investopedia: <http://www.investopedia.com/terms/n/netincome.asp?ad=dirN&qo=investopediaSiteSearch&qsrc=0&o=40186>.
- [8] Investor words. (n.d.). Retrieved July 10, 2016, from Investor words Web Site: [http://www.investorwords.com/3259/net\\_profit.html](http://www.investorwords.com/3259/net_profit.html).
- [9] Sharma, H. (2013, Jan 2). Indian pharmaceutical industry growth intact amid current headwinds faced by industry. Retrieved July 4, 2016, from Express Pharma: <http://archivepharma.financialexpress.com/sections/market-section/1593-indian-pharmaceutical-industry-growth-intact-amid-current-headwinds-faced-by-industry>.
- [10] V, N. (2015). Indian Pharma betting big on Uncle Sam. Retrieved July 6, 2016, from The Hindu Business Line: <http://www.thehindubusinessline.com/portfolio/indian-pharma-betting-big-on-uncle-sam/article7723173.ece>.