



## PROFITABILITY ANALYSIS OF SELECTED PHARMACEUTICAL COMPANIES IN INDIA

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### **Abstract**

The pharmaceutical industry is important because it is a major source of medical innovation. The Indian pharmaceuticals market is the third largest in terms of volume and thirteenth largest in terms of value, as per a report by Equity Master. Branded generics dominate the pharmaceuticals market, constituting nearly 70 to 80 per cent of the market. India enjoys an important position in the global pharmaceuticals sector. The country also has a large pool of scientists and engineers who have the potential to steer the industry ahead to an even higher level. Profit is the engine that drives the business enterprise. There should be enough profits to every firm or business enterprise to survive and grow in long run. Profitability means ability to make profits from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. In this research paper, 9 Pharmaceutical companies in India which are enlisted in the sectoral index of NSE CNXPHARMA have been selected. The main objective of this research paper is to analyse the Profitability position of the selected Pharmaceutical companies for last ten years (2005-2015). Our study is based on secondary data. Profitability position is analyzed by using different profitability ratios and ANOVA of selected Pharmaceutical companies. Through ANOVA, differences in the mean percentages of any ratio of the selected Pharmaceutical companies can be traced.

**Keywords:** *Pharmaceutical companies, Profitability, Ratios, ROCE, ANOVA.*

### **1. Introduction**

Indian pharmaceutical firms are eyeing acquisition opportunities in Japan's growing generic market as the Japanese government aims to increase the penetration of generic drugs to 60 per cent of the market by 2017 from 30 per cent in 2014, due to ageing population and rising health costs. Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of a company and it will have no future, if it fails to make sufficient profits. Therefore the financial manager should continuously evaluate the efficiency of its company in term of profits. The profitably ratios are calculated to measure the operating efficiency of the company. Besides management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get reasonable return on their investment. This is possible only when the company earns enough profits.

### **2. Review of Literature**

**Amalendu Bhunia (2010)** had undertaken an analysis of financial performance of pharmaceutical companies to understand how management of finance played a crucial role in the growth. This study covered two public sector drug & pharmaceutical enterprises listed on BSE. The study was undertaken for the period of twelve years from 1997-98 to 2008-09. In order to analyze financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios have been used. Statistical measures namely Linear Multiple Regression Analysis and Test of Hypothesis- t test were used to measure the relationship between the selected variables. **Dr.A.Vijayakumar and P.Gomathi (2013)** studied the profitability of Indian Oil Refineries from the period 1994 – 95 to 2008-09. From the analysis it was found that the profitability, return on investment and operating efficiency was satisfactory in the majority of the selected refineries over study period. Majority of the selected refineries experienced a strong tendency in profitability to decline over the study period. **Dr. T.Duraipandi and V.P.Nallaswamy(2015)** studied the profitability of the selected public sector oil refineries in India. They concluded that, the profitability of the selected companies was affected by various control process on output and price, operating cost, distribution cost. The return on capital employed was good and denotes that the selected companies have utilized the owners funds and fixed assets.

### **3. Objectives of the Study**

The main objective of the study is to analyse the profitability position of the selected pharmaceutical companies.

### **4. Research Methodology**

#### **4.1 Types of Data**

This study uses the secondary data to ascertain the profitability of the selected pharmaceutical companies.



#### 4.2 Methods of Data Collection

The study is mainly relied on secondary data. The data analyzed and interpreted in this study related to all the selected companies are collected from “Capitaline” and “PROWESS” databases, which are the most reliable on the empowered corporate database of Bombay Stock Exchange and Centre for Monitoring Indian Economy (CMIE) respectively. Besides Capitaline and PROWESS databases, relevant secondary data have also been collected from BSE Stock Exchange Official Directory, CMIE Publications, Annual Survey of Industry, Business Newspapers, Reports on Currency and Finance, Libraries of various research institutions and through the Internet. As the study required a variety of data, various websites have been comprehensively searched.

#### 4.3 Data Analysis and Interpretation

Collected data is analysed and interpreted with the help of accounting and statistical tools and techniques which are as follows:

**Accounting techniques :** Ratio analysis is used as an accounting technique in which major Profitability ratios are used for analysis and interpretation such as Gross Profit(GP) ratio, Net Profit (NP) ratio, Operating Profit (OP) ratio, Return On Capital Employed (ROCE) ratio, Return On Net worth (RONW) ratio.`

**Statistical techniques:** Statistical tools such as mean, standard deviation, variance and coefficient of variations are used to ascertain the average position of profitability ratios. Then technique of ANOVA is used to test if there is any difference in the profitability position of different companies of the same industry during the study period and correlation analysis is used to identify the relationship between short-term profitability positions of the companies.

#### 4.4 Sample Design

The Pharmaceutical industry is purposively selected for the present study, considering its importance and its contribution to economy. Owing to several constraints such as non-availability of financial statements or non-working of the company in a particular year, merger with other companies, not listed in stock exchanges etc., it was decided to restrict the number of sample companies to nine public sector pharmaceutical companies in India which are listed in National Stock Exchange and the stocks of the companies which included in the sectoral stock index CNXPHARMA are taken for the study. The selected companies includes in the present study are: Aurobindo Pharma Ltd., Cadila Healthcare Ltd., Cipla Ltd., Divi's Laboratories Ltd., Dr. Reddy's Laboratories Ltd., Glenmark Pharmaceuticals Ltd., Lupin Ltd., Piramal Enterprises Ltd. and Sun Pharmaceutical Industries Ltd.

#### Period of Study

The present study covers a period ten years from 2005-06 to 2014-15. This ten year period is chosen in order to have a fairly long, cyclically well balanced period, for which reasonably homogenous reliable and up-to-date financial data are available.

### 5 . Analysis & Interpretation

#### 5.1 Profitability Ratio Analysis

##### 5.1.1 Gross Profit Ratio

Gross profit ratio measures the relationship of gross profit to net sales and is usually represented as a percentage.

**Table 5.1.1,Gross Profit Ratio of Selected Pharmaceutical Companies**

Year	Auro bindo	Cadila	Cipla	Divis	Dr Reddys	Glen mark	Lupin	Piramal	Sun Pharma	Average
2005 - 06	23.1	54.0	39.5	46.3	55.1	57.9	41.7	50.4	46.6	46.1
2006 - 07	26.6	56.9	38.6	49.0	65.3	62.9	41.6	52.7	45.0	48.7
2007 - 08	29.4	55.4	39.4	53.7	55.3	64.6	45.7	53.4	48.4	49.5
2008 - 09	31.2	55.4	41.9	55.9	58.8	69.9	45.7	54.7	47.1	51.2
2009 - 10	35.4	50.7	44.0	60.2	60.0	68.8	49.4	54.3	61.5	53.8
2010 - 11	36.4	63.9	42.1	52.4	61.8	66.8	49.9	41.6	63.9	53.2
2011 - 12	29.8	56.7	48.2	51.1	63.2	68.6	50.1	40.5	66.2	52.7
2012 - 13	33.5	52.8	54.2	53.0	62.4	67.8	53.7	42.1	47.1	51.8
2013 - 14	41.6	54.8	52.9	54.3	63.4	69.5	58.0	56.7	46.1	55.3



2014 - 15	43.7	60.2	52.5	51.7	60.4	62.2	58.8	57.6	42.3	54.4
Mean	33.1	56.1	45.3	52.8	60.6	65.9	49.5	50.4	51.4	51.7
SD	6.4	3.7	6.1	3.8	3.4	3.9	6.1	6.5	8.8	2.8
CV	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Max	43.7	63.9	54.2	60.2	65.3	69.9	58.8	57.6	66.2	55.3
Min	23.1	50.7	38.6	46.3	55.1	57.9	41.6	40.5	42.3	46.1
CAGR	6.6	1.1	2.9	1.1	0.9	0.7	3.5	1.3	-1.0	1.7

Source: Computed from secondary data

**Table 1:** Gross Profit ratio of selected pharmaceutical companies in India (in %) ANOVA:

F.Value (Between the years)-2.70 (Critical value 2.01);

F.Value (Between the companies) – 32.05 (Critical value 2.07); Significance level: 5 %

The Table 5.1.1 indicates that, the gross profit ratio of the selected pharmaceutical companies in India during the study period. The gross profit ratio of the selected pharmaceutical companies shows fluctuating trend during the study period. The first five years of the study the gross profit ratio registered an increasing trend from 46.1 per cent to 53.8 per cent. Afterwards it started declining trend amidst fluctuations in the last five years of the study period. The mean percentage of the gross profit ratio of the industry average is 51.7 per cent. The SD of the industry average is 2.8 and it denotes that the fluctuation in the gross profit ratio is very low. Glenmark registered highest average (65.9) of gross profit ratio among the selected companies during the study period followed by Dr. Reddy's, Cadila, Divis with the mean of 60.6, 56.1 and 52.8 percentages respectively. These companies are recorded their gross profit ratio above the industry average of 51.7 per cent. The SD of Sun Pharma is higher(8.8) among the selected companies. It states that this company had higher fluctuation in gross profit ratio and its high CV(0.20) also ensures the same. The high percentage of gross profit ratio among the selected companies during the study period is 69.9 per cent and it is recorded by Glenmark during the year 2008-09. While the lowest gross profit ratio during the study period is 23.1 and it is recorded by Aurobindo in the year 2005-06. The CAGR of the industry average is 1.7 per cent and it shows that there is a slow growth in gross profit ratio during the study period. All the selected companies registered positive CAGR during the study period except Sun Pharma. Aurobindo recorded high CAGR(6.6) among the selected companies.

The ANOVA reveals that, the differences in the mean percentages of Gross Profit Ratio between the years and between companies are significant because the calculated value of 'F' between the companies (2.70) and between the years(32.05) are greater than the table value 2.70 and 2.07 respectively. Hence the null hypothesis is rejected. It can be concluded that there is a significant difference in the mean percentages of gross profit ratio between the companies.

### 5.1.2 Net Profit Ratio

Net Profit ratio establishes a relationship between net profit (after taxes) and sales, and indicates the efficiency of the management in manufacturing, selling, administrative and other activities of the firm.

**Table 5.1.2, Net Profit Ratio of Selected Pharmaceutical Companies**

Year	Auro bindo	Cadila	Cipla	Divis	Dr Reddys	Glen mark	Lupin	Piramal	Sun Pharma	Average
2005 – 06	5.1	13.2	21.0	18.5	10.5	12.0	11.4	12.1	27.5	14.6
2006 – 07	12.3	14.5	19.4	26.4	29.8	16.7	15.4	11.7	28.0	19.4
2007 – 08	12.8	14.4	17.5	34.2	14.1	28.4	17.6	15.8	32.2	20.8
2008 – 09	4.7	15.7	15.7	35.6	13.5	25.5	14.4	11.9	32.8	18.8
2009 – 10	16.4	27.5	20.2	37.0	18.8	12.6	17.8	16.7	36.2	22.6
2010 – 11	14.4	20.9	15.2	33.1	17.0	17.5	18.0	1,583.5	44.5	196.0
2011 – 12	-1.0	20.9	16.1	29.6	13.5	16.4	14.9	11.3	42.3	18.2
2012 – 13	9.1	14.1	18.4	28.7	15.1	19.1	17.7	-16.5	21.2	14.1
2013 – 14	16.5	22.4	14.7	31.5	19.9	18.1	26.0	-18.6	-100.0	3.4
2014 – 15	18.7	24.1	11.7	27.5	16.8	19.4	24.6	15.5	-18.4	15.5



Mean	10.9	18.8	17.0	30.2	16.9	18.6	17.8	164.3	14.6	34.3
SD	6.3	5.0	2.9	5.4	5.3	5.1	4.5	498.8	43.9	57.1
CV	0.6	0.3	0.2	0.2	0.3	0.3	0.3	3.0	3.0	1.7
Max	18.7	27.5	21.0	37.0	29.8	28.4	26.0	1,583.5	44.5	196.0
Min	-1.0	13.2	11.7	18.5	10.5	12.0	11.4	-18.6	-100.0	3.4
Skew	-0.7	0.5	-0.3	-1.0	1.7	0.8	0.8	3.2	-2.4	3.1
Kurt	-0.4	-1.2	-0.3	1.4	3.8	0.4	0.3	10.0	5.9	9.8
CAGR	14.0	6.2	-5.7	4.0	4.8	4.9	7.9	2.6	-196.07	0.6

Source: Computed from secondary data

**Table 2:** Net Profit ratio of selected pharmaceutical companies in India (in %) ANOVA:

*F. Value (Between the years)-1.06 (Critical value 2.01);*

*F. Value (Between the companies) – 0.87 (Critical value 2.07) – Significance level: 5 %*

The Table 5.1.2 clearly states that the Net Profit Ratio of the selected pharmaceutical companies registered a sharp fluctuating trend along with the industry average during the study period. The mean of the net profit ratio of the selected companies is 34.3 per cent. The Piramal registered highest average of net profit ratio (164.3) among the selected companies. The second highest mean of net profit ratio among the selected companies is recorded by Divis followed by Cadila, Glenmark with 30.2, 18.8 and 18.6 percentages respectively. The SD of piramal is very high (498.8 per cent) and it denotes that this company faced very high fluctuations in the net profit ratio among the selected companies. The Sun Pharma also recorded second highest SD(43.9) that makes clear that heavy fluctuations affected the net profit ratio of the company. The highest CV(3.0) of Piramal and Sun Pharma ensures that both of these companies faced very high fluctuations among the selected companies during the study period. The highest net profit ratio among the selected companies during the study period is 1583.5 per cent and it is recorded by piramal during the year 2010-11. While the lowest net profit ratio is (100 per cent) and it is recorded by sun pharma during the year 2013-14. The CAGR of the industry average stood 0.6 it denotes that there is a very minimal growth in the net profit ratio and all the selected companies registered positive CAGR except Cipla and Sunpharma. The Aurobindo registered highest CAGR (14.0) among the selected companies during the study period.

The ANOVA clearly indicates that, there are no significant differences in the mean differences of net Profit Ratio between the years and between companies. Because the calculated value of 'F' between years (1.06) and between companies (0.87) is less than the table value of 'F' (2.01) and (2.07) respectively.

### 5.1.3 Operating Profit Ratio

Operating margin evaluates the company's pricing strategy and operating efficiency. Operating margin is a measurement of what proportion of a company's revenue is left over after paying for variable costs of production such as wages, raw materials, etc.

**Table 5.1.3, Operating Profit Ratio of Selected Pharmaceutical Companies**

Year	Auro bindo	Cadila	Cipla	Divis	Dr Reddys	Glen mark	Lupin	Piramal	Sun Pharma	Average
2005 – 06	12.8	19.6	23.1	32.3	17.8	22.3	17.7	18.8	24.9	21.0
2006 – 07	15.8	19.1	22.2	37.9	39.7	31.1	17.0	20.8	24.2	25.3
2007 – 08	16.3	17.8	17.0	42.8	19.2	39.1	21.2	23.5	31.4	25.4
2008 – 09	17.7	16.1	21.5	45.0	24.5	30.0	19.3	24.2	30.7	25.5
2009 – 10	22.3	7.4	23.5	45.8	26.9	30.8	24.3	24.1	38.6	27.1
2010 – 11	24.1	28.7	22.6	39.4	24.5	29.5	23.2	-7.7	43.2	25.3
2011 – 12	15.4	24.5	25.4	38.3	28.1	29.7	23.4	-6.6	45.7	24.9
2012 – 13	19.9	22.4	29.9	39.5	27.5	24.8	27.7	-6.4	24.3	23.3
2013 – 14	28.8	23.7	24.1	41.5	31.7	28.8	34.0	17.9	18.9	27.7
2014 – 15	29.2	32.4	22.7	38.6	26.4	33.2	35.7	22.4	-0.6	26.7



Mean	20.2	21.2	23.2	40.1	26.6	29.9	24.3	13.1	28.1	25.2
SD	5.7	7.0	3.2	3.9	6.1	4.5	6.4	14.0	13.4	1.9
CV	0.3	0.3	0.1	0.1	0.2	0.2	0.3	1.1	0.5	0.1
Max	29.2	32.4	29.9	45.8	39.7	39.1	35.7	24.2	45.7	27.7
Min	12.8	7.4	17.0	32.3	17.8	22.3	17.0	-7.7	-0.6	21.0
CAGR	8.6	5.2	-0.2	1.8	4.0	4.0	7.3	1.8	-168.9	2.4

Source: Computed from secondary data

**Table 3:** Operating Profit ratio of selected pharmaceutical companies in India (in %) ANOVA:

F.Value (Between the years)-0.48356 (Critical value 2.0127);

F.Value (Between the companies) – 8.17 (Critical value 2.06983) – Significance Level : 5%

The Table 5.1.3 exhibits the operating profit ratio during the study period. Further it can be noticed that the mean ratio of the industry average is 25.2 per cent. The Divis registered higher mean per cent (40.1) of operating profit margin ratio during the study period. The SD of the industry average is 1.9 clearly indicates that there is a mild fluctuation in the ratio from the year 2005-06 to 2015-15. Piramal registered higher SD(14.0) among the selected companies and SD is higher than mean which states that this company had heavy fluctuation in the operating profit ratio. The higher CV(1.1) also ensures the same. The higher operating profit margin ratio among the selected companies is 45.8 and it is obtained by Divis in the year 2009-10. While the low ratio is -7.7 and it is obtained by Piramal during the year 2010-11. The CAGR of the industry average is 2.4 and it denotes the mild growth during the study period. The CAGR of almost all the selected companies registered positive except Cipla and Sun Pharma. Aurobindo registered higher CAGR(8.6) shows that this company had higher growth of operating profit margin ratio during the study period. The negative and low growth rate may be attributed to the differences in the growth rates of operating profit margin and sales because of the factors such as high operating expenses, market condition and government policy Overall the operating profit margin ratio evidenced with positive growth.

The ANOVA reveals that the mean operating profit margin ratio of all the selected pharmaceutical companies showed no significant differences between the years of the study period. The acceptance of the null hypothesis as per ANOVA would indicate that there is an insignificant difference in the mean per cent of operating profit margin ratio between the companies. The calculated value of 'F'(8.17) which is above the table value of 2.06 between the companies. Hence it can be concluded that there is a significant differences in the mean percentages of operating profit margin between the companies during the study period.

#### 5.1.4 Return on Capital Employed

Return On Capital Employed (ROCE) is the ratio of net operating profit of a company to its capital employed. It measures the profitability of a company by expressing its operating profit as a percentage of its capital employed. Capital employed is the sum of stockholders' equity and long-term finance. Alternatively, capital employed can be calculated as the difference between total assets and current liabilities.

**Table 5.1.4, Return on Capital Employed of Selected Pharmaceutical Companies**

Year	Auro bindo	Cadila	Cipla	Divis	Dr Reddys	Glen mark	Lupin	Piramal	Sun Pharma	Average
2005 – 06	2.5	11.6	21.8	20.5	7.0	6.9	12.8	12.8	11.4	11.9
2006 – 07	4.8	10.9	18.2	34.3	29.0	11.5	14.5	12.3	13.8	16.6
2007 – 08	8.2	7.9	12.4	40.8	9.5	27.6	19.4	18.2	21.6	18.4
2008 – 09	9.7	2.6	15.5	36.1	13.4	5.0	19.4	12.4	21.9	15.1
2009 – 10	14.7	-1.8	17.9	23.3	15.7	6.5	21.3	17.3	15.5	14.5
2010 – 11	16.7	23.9	16.9	24.7	15.0	6.1	21.8	-2.1	19.4	15.8
2011 – 12	-1.2	12.7	19.7	28.5	19.5	10.9	23.1	-2.9	18.5	14.3
2012 – 13	11.6	8.9	19.9	29.1	18.9	8.9	33.7	-3.7	6.7	14.9
2013 – 14	22.5	11.6	15.8	30.8	22.7	14.7	40.3	-3.4	-21.9	14.8
2014 – 15	23.0	20.7	13.0	29.1	15.5	21.6	35.8	-1.1	-4.3	17.0
Mean	11.2	10.9	17.1	29.7	16.6	12.0	24.2	6.0	10.3	15.3



SD	8.1	7.6	3.0	6.1	6.4	7.4	9.2	9.3	13.8	1.8
CV	0.7	0.7	0.2	0.2	0.4	0.6	0.4	1.6	1.3	0.1
Max	23.0	23.9	21.8	40.8	29.0	27.6	40.3	18.2	21.9	18.4
Min	-1.2	-1.8	12.4	20.5	7.0	5.0	12.8	-3.7	-21.9	11.9
CAGR	24.9	6.0	-5.1	3.6	8.3	12.0	10.8	-178.23	-190.71	3.6

Source: Computed from secondary data

**Table 4:** Return On Capital Employed Ratio of selected pharmaceutical companies in India (in %) ANOVA:F.Value (Between the years)-0.38 (Critical value 2.01); F.Value (Between the companies) – 7.54 (Critical value 2.07) - Significance Level : 5%

The Table 5.1.4 reveals that, the return on capital employed ratio of all the selected pharmaceutical companies in India had a fluctuating trend along with its average. The mean of the industry average recorded as 15.3 per cent amidst moderate fluctuations. The higher average of ROCE is earned by Divis(29.7 per cent) followed by Lupin(24.2 per cent), cipla(17.1 per cent) and Dr. Reddy's(16.6 per cent). The SD of all the selected companies is above the industry average 1.8. From the SD and CV it can be perceived that all of the selected companies faced to fluctuations in the ROCE ratio during the study period. The highest ROCE recorded during the study period is 40.8 per cent and it is obtained by Divis during the year 2007-08. While the lowest ROCE ratio recorded by Sun Pharma(21.9) during the year 2013-14. Almost all the selected companies registered positive CAGR during the study period except Cipla, Piramal and Sun Pharma. Aurobindo registered highest CAGR of 24.9 denotes that the company had high growth in ROCE ratio during the study period among the selected companies.

The ANOVA reveals that, there is no significant difference in the mean percentages of return on capital employed ratio between the years, because the calculated value of 'F' (0.38) is more than the table value of 'F' (2.01), hence the null hypothesis is accepted. The calculated value of 'F' (7.54) between the companies is more than the table value of 'F' (2.07) and the null hypothesis is rejected. Hence it can be concluded that, there is a significant difference in the mean percentages of return on capital employed between the selected pharmaceutical companies during the study period.

### 5.1.5 Return on Net Worth

Return on net worth expresses the relationship between the net profits(after interest and taxes) and shareholders' funds. Shareholders' funds includes equity share capital, preference share capital, free reserves such as share premium, revenue reserves, capital reserves, retained earnings and surplus, less accumulated losses.

**Table 5.1.5, Return on Net Worth of Selected Pharmaceutical Companies**

Year	Auro bindo	Cadila	Cipla	Divis	Dr Reddys	Glen mark	Lupin	Piramal	Sun Pharma	Average
2005 - 06	7.7	22.4	30.6	20.7	9.3	21.1	28.4	17.6	31.5	21.0
2006 - 07	24.7	23.2	20.6	35.4	26.9	29.9	34.0	17.8	25.7	26.5
2007 - 08	23.8	22.4	18.7	40.5	9.9	37.8	33.7	29.7	24.1	26.7
2008 - 09	9.7	21.6	17.9	33.6	10.7	17.7	30.3	23.2	24.6	21.0
2009 - 10	27.5	31.0	18.3	22.3	14.3	7.2	25.6	29.5	15.7	21.3
2010 - 11	23.1	29.2	14.5	23.8	14.8	10.7	25.7	110.2	20.7	30.3
2011 - 12	-1.7	25.7	14.9	25.1	13.6	12.1	21.5	1.2	21.5	14.9
2012 - 13	16.9	17.1	17.0	23.9	16.3	15.3	26.0	-2.2	6.6	15.2
2013 - 14	29.2	24.9	13.8	26.1	20.7	14.9	33.3	-4.1	-38.2	13.4
2014 - 15	28.3	28.1	10.6	23.8	15.8	20.3	26.6	3.3	-6.5	16.7
Mean	18.9	24.6	17.7	27.5	15.2	18.7	28.5	22.6	12.6	20.7
SD	10.4	4.1	5.4	6.6	5.3	9.2	4.2	33.3	20.9	5.7
CV	0.6	0.2	0.3	0.2	0.4	0.5	0.1	1.5	1.7	0.3
Max	29.2	31.0	30.6	40.5	26.9	37.8	34.0	110.2	31.5	30.3
Min	-1.7	17.1	10.6	20.7	9.3	7.2	21.5	-4.1	-38.2	13.4
CAGR	14.0	2.3	-10.0	1.4	5.4	-0.4	-0.7	-15.5	-185.5	-2.3

Source: Computed from secondary data



**Table 5:** Return on Networth ratio of selected pharmaceutical companies in India (in %) ANOVA: F.Value (Between the years)-1.50 (Critical value 2.01);  
F.Value (Between the companies) – 1.51 (Critical value 2.07) - Significance Level : 5%

The Table 5.1.5 reveals that, the return on net worth ratio of the almost all selected pharmaceutical companies fluctuated throughout the study period. The mean of industry average is 20.7 per cent with the SD of 5.7. The Lupin(28.5) registered high RONW ratio during the study period followed by Divis, Cadila and Piramal with the mean percentages of 27.5, 24.6 and 22.6 respectively. The high SD among the selected companies during the study period is 33.3 and it was recorded by Piramal. Further the SD and CV connote that almost all the selected companies except Lupin had faced heavy fluctuations in the RONW ratio during the study period. The highest ratio of RONW among the selected companies during the study period is 110.2 and it is obtained by Piramal during the year 2010-11 while the lowest ratio is -38.2 and it is registered by Sun Pharma during the year 2013-14. The high growth in the RONW ratio secured by Aurobindo(14.0) among the selected companies. Further it is clear that, Cipla, Glenmark, Lupin, Piramal and Sun Pharma registered negative growth in RONW ratio during the study period along with the industry average. These companies registered declining trend in the RONW ratio.

The ANOVA reveals that, the difference in the average of return on shareholders' fund is insignificant between the years. Because the calculated value of 'F'(1.50) is less than the table value of 'F'(2.01), hence the null hypothesis is accepted. The differences in the average of return on shareholders' fund ratio is insignificant between the years as the calculated value of 'F' (1.51) is less than the table value of 'F' (2.07), hence the null hypothesis is accepted.

## 6. Conclusion

From the study it can be concluded that the profitability of the selected pharmaceutical companies are not similar in terms of their profit levels. Here, Profitability analysis is considered as a measure of creditworthiness of the owners, proper usage of resources and efficiency of management of the company. Hence all the selected pharmaceutical companies registered satisfactory level of profitability during the study period amidst fluctuations. All the companies must have to understand the significance of the profitability to their growth. The companies can look in to the prospect like reduction the abnormal downs in the profitability; enhance the stability in the cost control, efficient utilization of current assets, fixed assets and acquiring cheaper source of finance. These may help them to attain the competitiveness in the domestic and global market in the near future.

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