

Estimating the factors affecting the profitability of Pharmaceutical firms

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Abstract - The Pharmaceutical industry has turned as highly competitive with the coming of product patents in India from 2005. There are numerous factors affecting the financial performance of companies in Pharmaceutical industry. In this competitive environment there is a need to identify the factors affecting the financial performance of Pharmaceutical companies. To assess the performance of the economic entities from this sector is of high importance for the management, shareholders, trading partners and creditors. This study focuses on investigating and analyzing the financial statements for 50 Pharmaceutical companies in India. The analysis is based on data corresponding to the period 2005-2017 by using mean, coefficient of variation and exponential growth rate.

Key-words: Financial statements, Patents, Performance, Pharmaceutical industry.

I. INTRODUCTION

The Pharmaceutical Industry in India is ranked at 3rd position in world. From 1960s The Government of India encouraged the growth of Pharmaceutical sector, with the arrival of Patent act 1970. Pharmaceutical sector in India is at boom, because as the population is increasing the need for the healthcare facilities and medicines is also increasing. This sector is the main focus of the policy makers because it has great potential. The Pharmaceutical industry discovers, develops, produces and markets medicines, enzymes or pharmaceutical drugs for use as medications. Healthcare has become the basic necessity of every human being like other needs –food, hygiene, education etc. Besides providing direct benefits to the human society, the healthcare sector also provides a wide range of career opportunities. India has adopted the product patents in accordance with WTO agreement in January 2005. In the patent amendment act, India implemented product patent protection for Pharmaceutical and pharmaceutical products. Traditionally the industry had been only excelling in reverse engineering for manufacturing of drugs and sales of their drugs were focused only in the domestic market. However, with the coming of product patent from 2005, the major players in this industry are forcibly undergoing a strategic shift in their business models. The pharmaceutical sector witnessed a consistent growth of around 16% from 1995 onwards. Because of the competence gained by the Indian pharmaceutical companies in process engineering, the Indian companies also emerged as the major players in the domestic market. A major invention which is known as therapeutic revolution resulted in boom in the Pharmaceutical sector. There was a shift in drug therapy from treating the symptoms to treating the disease itself. The Government of India realized that foreign technology is an important component for the growth of

pharmaceutical sector, so Government of India decided to take liberal attitude towards MNCs and allowed them to establish plants in India. This liberal policy of Government has result into rapid progress in this sector. MNCs were not keen to establish production units in the country because the production of bulk drugs required investment in plant and machinery whereas importing bulk drugs and processing them into the formulation was an easier and more profitable business. To overcome the structural weakness the sector was suffering from, the government made it mandatory for foreign multinational companies to establish their production unit in the country and produce drugs from the basic stage. The license was granted under the supervision of the Director General of Technical Development (DGTD) for setting up a new unit or expansion of the existing units keeping into account the medicinal need for the country. The industry is bracing itself for some fundamental changes in the marketplace and is looking at newer ways to drive growth. India's pharmaceuticals industry looks set for a solid long-term growth. It already ranks fourteenth in the global league table, with sales of almost US\$19 billion in March 2009. However, PwC estimates that it will rise to approximately US\$50 billion by 2020 – a 163% in the space of eleven years. The term Profitability refers to the Revenue generated by the firm during a given period after deducting all expenses incurred during that time period. Profit is the main aim of every firm, without profits the firms are not able to survive. Profitability of the firm can be assessed by the various factors like:-Net sales, Leverage, Return on Assets, and Return on Capital Employed and Net profits of the firms.

II. LITERATURE REVIEW

Raghunathan & Das (1999) have discussed in their paper regarding corporate performance of post-Liberalization. They analysed the performance of Indian Manufacturing

sector in the last 8 years since liberalization on the parameters of profitability, liquidity, leverage and solvency. They also observed that the solvency and profitability ratios were encouraging till 1996 they have been gradually diminishing after that and this problem gets more pronounced when the EVA was calculated which showed that the Indian Manufacturing sector has destroyed wealth, while the MNCs have generated wealth for their shareholders. They have pointed out after the analysis; the poor corporate performance has led to an economic slowdown and not the other way round and corporate raised funds during the blacken days of equity markets and ended up investing these funds at below their cost of capital. In short, the outcome has been a prolonged economic slowdown.

Rajeswari (2000) studied about the Liquidity Management of Tamil Nadu Cement Corporation Ltd. Alangulam-A Case Study. She concluded from the analysis; the liquidity position of TANCEM was not stable. After the comparative analysis regarding liquidity ratios, she has found there was too much of liquidity in the first two years of the study period and also a very high degree of liquidity was also bad as idle assets earn nothing and affects profitability. In short, she concluded that the liquidity management of TANCEM is poor and is not satisfactory

Patra (2005) has studied about the impact of liquidity on profitability by using current ratio, acid test ratio. Current assets to total assets ratio, inventory turnover ratio, working capital ratio, receivable turnover ratio, cash turnover ratio of selected two company's viz., Tata Iron & Steel Company Limited for the period 1999 to 2005. Using mean, standard deviation, co-efficient variation, correlation and co-efficient of relation. He has concluded that Out of seven liquidity ratios selected for this study, four ratios namely current ratio, acid test ratio, current assets to total assets ratio and inventory turnover ratio showed negative correlation with profitability ratio. Whereas The remaining three ratios namely working capital turnover ratio, receivable turnover ratio and cash turnover ratio have shown positive association with the profitability ratio, all of which are statistically significant at 5% level of significance. He found that the impact of liquidity ratios on profitability showed both negative and positive association. However, these correlation co-efficient were not statistically significant. The result showed that all the correlation co-efficient is as desirable except correlation co-efficient between inventory turnover ratio and ROI while undesirable sign between ITR and ROI was not supported by the multiple regression analysis, which indicated the positive association between these two variables. He mentioned that growing of profitability which was depends upon many factors including liquidity.

Toby (2007) did research on "Financial management modelling of the performance of Nigerian Quoted Small and medium-sized Enterprises. He has concluded that the

sustained growth, adequate liquidity and requisite profitability in the Small and Medium sized Enterprise sector is significantly related to their investment and financing decisions. The experiential results showed that there was not significant different between current ratio and the gross profit margin ratio and found the working capital gap constant. He has also observed that the citation SMES current assets ratio, liquidity ratio, cash reserve requirement and loan deposits ratio was significantly perceptive to commercial Banks. Overall, he concluded over model results confirm that the Small and Medium sized Enterprise in Nigeria is still limited by the liquidity as well as profitability quandary, efficiency limitations, Pecking order reversals, stringent monetary policy regimes and a risk-over banking system.

Objective of the study

The main objective of the present work is to study the Profitability as a determinant of financial performance on the basis of Net Sales, leverage, Return on Assets, Return on Capital Employed and Net profits.

III. METHODOLOGY

STATEMENT OF THE PROBLEM

In the case of India, only a few attempts had been made in the past to understand how Indian pharmaceutical companies are competing in for financial performance. But very less had been reported on factors affecting financial performance of Pharmaceutical companies after the implementation of product patent in India. As the sector is growing tremendously and ample opportunities are existing in this sector. So there is a strong need to study the drivers of financial performance of companies in Pharmaceutical sector.

DATA TYPE AND SOURCE OF DATA COLLECTION

The study has been undertaken for 12 years (2005 to 2017). In order to analyze to profitability Net Sales, leverage, Return on Assets, Return on Capital Employed and Net profits are used. The 50 Pharmaceutical companies were chosen on the basis of highest net sales. Secondary data was collected from financial statements from database of moneycontrol. Various statistical measures mean, standard deviation and coefficient of variation have been used.

IV. RESULTS AND DISCUSSIONS

1) Net Sales of Pharmaceutical Companies:-

The Table No (1.1) shows the Coefficient of Variation and Exponential growth Rate of Pharmaceutical Firms. The Coefficient of Variation of Net sales shows the variability and consistency of sales Turnover. The Firm Novartis India (22.58%), AstraZeneca (32.93%), Jubilant life (34.25%) has low degree of variability and high consistency as

compared to the firms- Glenmark(105.59%), Natco(96.07%), Shilpa(85.09%) which has high degree of variability and low degree of consistency. A higher rate EGR of Net sale of the Pharmaceutical Firms shows the rapid increase in the sales of the Pharmaceutical Firms. Laurus Labs (27.0086) is the leading firm, which shows the increase in sales at rapid rate after the Laurus Firm the other firms that comes are Ajanta(21.618), Shilpa(24.1075).The Firms Sanofi India(9.418), Orchid Pharma(0.06669), Panacea (5.132) has low degree of Growth in sales.

2) Leverage of Pharmaceutical Firms:-

The Table No (1.2) highlights the leverage (debt to equity ratio) of Pharmaceutical Companies. The coefficient of variation of leverage shows the variability of using the debt along with equity capital. Leverage of Wockhardt (-591.40%), there is very low degree of variability and other firms like: - AstraZeneca (0%), Dr. Lal Path Lab (0%) also have low value of coefficient of variation of Leverage as compare to the FDC (181.50%), Shilpa (116.44%), IOL (335.03%) which has very high rate of Coefficient of variation of Leverage, These firms have high degree of variability and less consistency. Table No (1.4) highlights the Exponential Growth Rate of Leverage which depicts the changes in the amount of the debt and equity. At the end of the Year March, 2017 it was revealed that Orchid Pharma (13.29%), Panacea Pharma (2.182%) has highest exponential growth rate, and the firms Orchid (0.666%), Panacea firm (5.132%), Wockhardt (7.71%) has lowest exponential growth rate.

3) Return on Assets:-

The Table No (1.3) represents the data relating to the ROA of Pharmaceutical Firms, their coefficient of variation, Exponential Growth Rate, Standard Deviation. The Coefficient of Variation of Return on Assets indicates the volatility of Return on assets. It was observed at the end of the year March, 2017 that the coefficient of variation was lowest in the case of Morepen (-178.73%), and followed by (-515.67%) and FDC (22.185%), it signifies the stability of ROA .There was high degree of instability in the case of Panacea Biotec (426.87%), Wockhardt (310.008%), Sequent Scientific (299.77).High degree of instability point out the lowest level of consistency. Exponential Growth Rate of Return on Assets proves the growth in the Pharmaceutical Sector from the Year 2005 to 2017.Ajanta Firm (460.30%), was the firm at top from the selected firms, then came the Neuland (42.23%), Natco (13.63%). Lowest Exponential Growth Rate was observed in the case of Venus (-15.79%) and followed by the Nectar (-7.62%) and Wockhardt (-10.05%).

4) Return on Capital Employed:-

The Table (1.4) indicates the Coefficient of Variation and Exponential Growth Rate of the Pharmaceutical Firms from the year (2005 to 2017). The Coefficient of Variation

represents the Return on Capital Employed. Coefficient of Variation was lowest in the case of Sterling Firm (-1064.61%) and it was followed by the Wanbury (-414.23%), Morepen Lab (-179.37%).It shows the High degree of consistency of ROCE in relation to these firms:- Sequent Scientific (2852.58%), Orchid firm (769.56%), Wockhardt (392.70%), these firms had high value of Coefficient of Variation. EGR of the Pharmaceutical Firms represents the continuous growth from 2004 to the end year 2017in Return on Capital Employed. Ajanta (46.186%) was the leading firm which has rapid rise in growth and followed by Neuland (41.35%),Natco (12.14%).It was revealed assessed at the end of the year 2017 that Sun Pharma (-29.907), Wockhardt (-8.220%) and Strides Shasun (-7.145%) has lowest growth.

Table No 1.1 showing Mean, Coefficient of Variation and EGR of Net sales

S.No	Company	Mean	S.D	CV	EGR
1	Lupin	5351.81	3944.24	73.70	18.55
2	Cipla	8183.20	3776.11	46.14	10.62
3	Dr Reddys Labs	5777.16	3292.71	57.00	17.42
4	Aurobindo Pharm	4407.78	2998.02	68.02	15.66
5	Sun Pharma	3393.35	2524.80	74.40	17.10
6	Glenmark	2269.15	2396.14	105.60	25.14
7	Torrent Pharma	2113.65	1584.07	74.94	17.90
8	Alkem Lab	2367.38	1207.04	50.99	16.64
9	Piramal Enter	1966.36	874.10	44.45	7.47
10	Divis Labs	1684.31	1243.27	73.81	20.01
11	Cadila Health	2825.59	1752.43	62.02	8.06
12	Ipca Labs	1886.09	990.71	52.53	12.12
13	GlaxoSmithKline	2096.15	674.99	32.20	7.37
14	Alembic Pharma	1981.90	744.21	37.55	14.39
15	Abbott India	1378.23	887.04	64.36	15.07
16	Jubilant Life	2288.56	784.06	34.26	6.09
17	Biocon	1424.75	722.60	50.72	12.43
18	Sanofi India	1365.80	557.94	40.85	9.42
19	Wockhardt	1735.05	568.12	32.74	7.71
20	Strides Shasun	855.35	620.67	72.56	16.43
21	Pfizer	1127.97	505.49	44.81	9.07
22	Laurus Labs	1221.34	569.95	46.67	27.01
23	Ajanta Pharma	676.13	565.24	83.60	21.62
24	Nectar Life	1000.39	588.42	58.82	15.70
25	Unichem Labs	785.96	322.33	41.01	10.33
26	Granules India	572.63	461.87	80.66	18.61
27	JB Chemicals	729.75	279.36	38.28	10.03
28	Indoco Remedies	520.70	303.01	58.19	14.95
29	Aarti Drugs	598.11	345.48	57.76	12.10
30	Natco Pharma	508.64	488.66	96.07	20.80
31	Hikal	542.90	295.90	54.50	14.89
32	FDC	641.35	243.65	37.99	9.59
33	Merck	593.86	239.11	40.26	7.72
34	Dr Lal PathLab	541.38	237.82	43.93	21.57
35	Orchid Pharma	1184.44	446.09	37.66	0.67
36	Shilpa	287.70	244.82	85.09	24.11
37	Novartis India	682.41	154.10	22.58	1.88
38	Panacea Biotec	662.23	231.67	34.98	5.13

39	Ind-Swift Labs	655.62	344.80	52.59	10.90
40	SMS Pharma	289.55	171.09	59.09	9.96
41	IOL Chemicals	360.27	193.00	53.57	20.27
42	AstraZeneca	411.84	135.66	32.94	8.26
43	Claris Life	536.68	210.62	39.25	-19.33
44	Sterling Bio	876.59	455.65	51.98	-0.43
45	Neuland Lab	341.45	149.05	43.65	10.57
46	Suven Life Sci	240.75	190.26	79.03	18.85
47	Morepen Lab	257.36	135.90	52.80	11.48
48	Wanbury	297.32	171.09	57.54	16.16
49	Venus Remedies	289.05	166.17	57.49	22.03
50	Sequent Scienti	211.23	153.44	72.64	23.41

Table No 1.2 showing Mean, Coefficient of Variation and EGR of Leverage ratio of companies

S.No	Company	Mean	S.D	CV	EGR
1	Lupin	0.48	0.45	93.54	-19.54
2	Cipla	0.10	0.07	71.43	-11.65
3	Dr Reddys Labs	0.19	0.10	54.29	14.51
4	Aurobindo Pharm	1.00	0.49	49.35	-6.09
5	Sun Pharma	0.34	0.49	143.75	-3.34
6	Glenmark	0.71	0.77	108.81	-3.95
7	Torrent Pharma	0.50	0.20	40.03	-1.64
8	Alkem Lab	0.32	0.17	53.49	-11.02
9	Piramal Enter	0.50	0.29	57.74	-3.27
10	Divis Labs	0.11	0.14	135.20	-21.38
11	Cadila Health	0.48	0.18	37.03	-4.06
12	Ipcas Labs	0.45	0.16	34.83	-6.77
13	GlaxoSmithKline	0.00	0.00	0.00	0.00
14	Alembic Pharma	0.32	0.37	113.79	-27.38
15	Abbott India	0.00	0.00	198.71	0.00
16	Jubilant Life	1.24	0.42	33.70	-6.49
17	Biocon	0.07	0.03	40.79	-10.19
18	Sanofi India	0.00	0.00	0.00	0.00
19	Wockhardt	-1.24	7.34	-591.40	-1.39
20	Strides Shasun	1.26	1.50	119.21	-5.27
21	Pfizer	0.00	0.01	374.17	-100.00
22	Laurus Labs	1.20	0.41	34.04	-16.38
23	Ajanta Pharma	0.62	0.48	78.26	-13.90
24	Nectar Life	1.17	0.50	42.47	-1.08
25	Unichem Labs	0.03	0.03	94.94	-16.37
26	Granules India	0.87	0.52	59.70	-8.39
27	JB Chemicals	0.19	0.13	65.68	-9.43
28	Indoco Remedies	0.21	0.06	29.88	3.34
29	Aarti Drugs	1.54	0.31	19.94	-3.01
30	Natco Pharma	0.50	0.33	66.66	-15.44
31	Hikal	1.38	0.37	26.83	-1.63
32	FDC	0.01	0.02	181.51	-25.82
33	Merck	0.00	0.00	0.00	0.00
34	Dr Lal PathLab	0.00	0.00	0.00	0.00
35	Orchid Pharma	4.28	4.74	110.60	13.30
36	Shilpa	0.39	0.45	116.45	-0.84
37	Novartis India	0.01	0.01	164.08	0.00
38	Panacea Biotech	1.48	0.79	53.43	2.18
39	Ind-Swift Labs	2.46	1.62	65.65	2.18
40	SMS Pharma	0.75	0.30	40.39	-6.31
41	IOL Chemicals	25.79	86.40	335.04	-29.91
42	AstraZeneca	0.00	0.00	0.00	0.00
43	Claris Life	0.45	0.30	67.80	-26.46
44	Sterling Bio	2.07	1.22	59.11	2.17
45	Neuland Lab	2.64	1.32	50.13	-5.75
46	Suven Life Sci	0.33	0.17	50.93	-7.82
47	Morepen Lab	1.40	1.95	139.41	-184.69
48	Wanbury	1.53	2.10	137.98	-3.93
49	Venus Remedies	0.71	0.27	37.60	2.04
50	Sequent Scienti	1.16	1.75	150.77	1.31

Table No 1.3 showing Mean, Coefficient of Variation and EGR of ROA of companies

S.No	Company	Mean	S.D	CV	EGR
1	Lupin	15.05	5.53	36.78	5.81
2	Cipla	12.03	3.07	25.49	-5.27
3	Dr Reddys Labs	9.42	3.99	42.38	-2.05
4	Aurobindo Pharm	8.13	4.95	60.87	3.85
5	Sun Pharma	8.85	11.87	134.14	-30.75
6	Glenmark	10.10	4.25	42.12	3.65
7	Torrent Pharma	12.82	4.33	33.76	-2.22
8	Alkem Lab	12.35	2.10	17.01	3.10
9	Piramal Enter	14.09	25.04	177.79	-11.59
10	Divis Labs	19.85	4.65	23.43	-0.79
11	Cadila Health	12.86	4.50	34.98	-3.86
12	Ipcas Labs	10.15	3.79	37.33	-7.52
13	GlaxoSmithKline	20.55	7.00	34.08	-5.60
14	Alembic Pharma	18.06	7.12	39.41	8.04
15	Abbott India	18.11	4.90	27.08	-6.62
16	Jubilant Life	4.64	3.84	82.73	-10.49
17	Biocon	12.95	5.24	40.49	-6.01
18	Sanofi India	15.43	4.28	27.74	-5.96
19	Wockhardt	3.68	11.41	310.01	-10.06
20	Strides Shasun	15.00	39.36	262.42	-7.40
21	Pfizer	15.37	9.31	60.59	1.39
22	Laurus Labs	7.05	3.17	45.02	10.82
23	Ajanta Pharma	10.83	13.86	128.04	46.36
24	Nectar Life	4.74	2.06	43.36	-7.63
25	Unichem Labs	11.21	4.16	37.12	-6.07
26	Granules India	5.49	2.50	45.62	3.74
27	JB Chemicals	13.48	12.24	90.83	-2.32
28	Indoco Remedies	8.85	2.12	24.00	-5.43
29	Aarti Drugs	5.23	1.56	29.90	2.23
30	Natco Pharma	8.65	4.48	51.80	13.64
31	Hikal	6.33	3.00	47.38	-6.36
32	FDC	16.41	3.64	22.19	-4.32
33	Merck	13.63	6.31	46.30	-6.88
34	Dr Lal PathLab	20.60	2.20	10.69	2.35
35	Orchid Pharma	0.69	5.25	762.20	-5.62
36	Shilpa	10.72	3.49	32.52	-1.86
37	Novartis India	14.98	6.58	43.95	-12.20
38	Panacea Biotech	1.84	7.83	426.88	1.59
39	Ind-Swift Labs	1.93	4.57	237.19	-6.29
40	SMS Pharma	4.57	2.52	55.18	1.32
41	IOL Chemicals	2.31	5.80	251.00	-21.37
42	AstraZeneca	9.56	15.63	163.50	-5.99
43	Claris Life	6.59	3.97	60.25	-14.94
44	Sterling Bio	0.72	4.82	670.70	-12.76
45	Neuland Lab	2.99	2.23	74.33	42.24
46	Suven Life Sci	8.52	7.30	85.64	6.79
47	Morepen Lab	-3.32	5.93	-178.73	20.80
48	Wanbury	-3.61	18.64	-515.67	-5.94
49	Venus Remedies	10.29	7.54	73.22	-15.79
50	Sequent Scienti	3.23	9.69	299.78	-100.00

Table No 1.4 showing Mean, Coefficient of Variation and EGR of ROCE of companies

S.No	Company	Mean	S.D	CV	EGR
1	Lupin	22.17	8.29	37.41	2.02
2	Cipla	17.08	4.23	24.77	-5.94
3	Dr Reddys Labs	13.03	5.26	40.39	-1.14
4	Aurobindo Pharm	12.87	8.18	63.58	4.62
5	Sun Pharma	9.73	14.74	151.49	-29.91
6	Glenmark	14.08	5.97	42.38	2.07
7	Torrent Pharma	17.05	5.99	35.14	-2.77
8	Alkem Lab	16.95	3.61	21.32	4.27
9	Piramal Enter	17.16	26.98	157.22	-11.23
10	Divis Labs	24.62	5.06	20.57	-2.80
11	Cadila Health	17.26	5.53	32.07	-3.57
12	Ipsa Labs	14.97	5.80	38.78	-8.77
13	GlaxoSmithKline	26.36	11.32	42.95	-6.56
14	Alembic Pharma	21.19	5.54	26.15	-1.50
15	Abbott India	25.93	8.30	32.03	-7.29
16	Jubilant Life	6.08	5.10	83.89	-11.99
17	Biocon	16.35	6.65	40.67	-7.11
18	Sanofi India	20.52	5.60	27.30	-5.62
19	Wockhardt	5.44	21.37	392.71	-8.22
20	Strides Shasun	21.59	58.01	268.73	-7.15
21	Pfizer	21.21	12.84	60.52	0.31
22	Laurus Labs	14.03	7.13	50.83	4.43
23	Ajanta Pharma	14.58	18.13	124.33	46.19
24	Nectar Life	8.05	3.13	38.85	-5.50
25	Unichem Labs	13.94	5.17	37.07	-5.40
26	Granules India	7.92	3.94	49.74	3.75
27	JB Chemicals	17.38	14.27	82.07	-3.18
28	Indoco Remedies	12.14	3.29	27.07	-5.60
29	Aarti Drugs	8.82	4.27	48.40	3.95
30	Natco Pharma	12.13	5.97	49.25	12.15
31	Hikal	9.35	4.00	42.81	-6.46
32	FDC	19.78	4.84	24.45	-5.21
33	Merck	15.53	8.70	56.00	-6.68
34	Dr Lal PathLab	27.81	3.75	13.48	-2.69
35	Orchid Pharma	1.74	13.41	769.56	15.61
36	Shilpa	14.54	5.59	38.48	-4.47
37	Novartis India	19.50	9.72	49.86	-13.31
38	Panacea Biotec	1.90	10.78	567.60	-19.97
39	Ind-Swift Labs	2.37	6.37	268.55	-16.76
40	SMS Pharma	6.42	3.46	53.88	2.13
41	IOL Chemicals	2.99	7.98	267.19	-19.95
42	AstraZeneca	12.03	34.15	283.96	-4.96
43	Claris Life	9.37	5.61	59.86	-14.70
44	Sterling Bio	-0.77	8.17	-1064.62	-14.73
45	Neuland Lab	6.38	4.85	75.94	41.36
46	Suven Life Sci	11.21	10.41	92.87	6.35
47	Morepen Lab	-4.49	8.05	-179.38	-202.74
48	Wanbury	-12.16	50.38	-414.23	-24.84
49	Venus Remedies	13.82	10.32	74.69	-16.49
50	Sequent Scienti	0.89	25.27	2852.59	-21.05

5) Net Profits of Companies

The Table No (1.5) represents the Coefficient Of Variation and Exponential Growth rate in Net Profits of the

Pharmaceutical Firms. The Coefficient of Variation shows the fluctuations in the Net Profit of the Firms. It was disclosed that Sequent Scientific (1226.51%) was the firm with lowest value of the Coefficient of the Variation and more consistency in the Net Profit of the Firm, and it was followed by Panacea (-458.88%) and Morepen (-183.9%),It was observed at end of March 2017 that in opposite of these firms. There were firms such as Orchid (1450.34%) with the highest value of Coefficient of Variation and followed by the IOL (537.25%) at the end of year 2017. Exponential Growth Rate measures the Growth Rate in Net Profit of the Pharmaceutical Firms. Ajanta Pharma (38.05%) was the top leading firm, after it Claris life (17.50%) and Neuland (15.10%) have taken position. It was witnessed that Venus (-9.854%), Wanbury (9.835%), Hikal (-7.322%) had low growth in case of Net Sales.

V. FINDINGS

- It was found that the Coefficient of variation of Net Sales of Novartis India (22.58%) is lowest and low degree of variability an opposite of it Glenmark (105.39%)has highest value of coefficient of variation and great degree of volatility. Laurus Labs (27.008%) is the leading firm in case of EGR of Net Sales, and Orchid Pharma (0.0669%) is the lowest Exponential Growth Rate Firm.
- Coefficient of Variation of Wockhardt (-591.40%) is the lowest value and FDC (181.50%) has highest value of Coefficient of Variation.It is revealed that Orchid Pharma (13.29%) is the leading firm in case of EGR of Leverage and Wockhardt (7.71%) has lowest Exponential Growth rate.
- Morepen has lowest degree of instability in Return on Assets due to lower value of coefficient of variance (-178.73%), and highest Coefficient of Variation of Panacea Biotec (426.87%).Ajanta Pharma(460.30%) is the top leading firm in case of EGR of Return on Assets and Venus(-15.79%) has lowest exponential growth rate.
- It is observed that Coefficient of Variation of ROCE is highest in case of Sequent Scientific(2852.58%) and lowest of Sterling Firm (-1064.61),Sterling has high level of variations.
- Ajanta Firm has lowest Exponential Growth rate of ROCE (-13.90%) and Orchid Pharma has highest Exponential Growth Rate.It is witnessed that Coefficient of Variation of Net Profit of Sequent Scientific is lower (1226.51%) and higher in case of Orchid Pharma (1450.34%).
- The Ajanta Firm has Exponential Growth Rate of (38.05%) of Net Sales and Venus has Exponential Growth rate of (-9.85%).

Table No 1.4 showing Mean, Coefficient of Variation and EGR of Net Profits of companies

S.No	Company	Mean	S.D	CV	EGR
1	Lupin	17.22	6.21	36.08	8.37
2	Cipla	15.75	3.24	20.57	-3.84
3	Dr Reddys Labs	15.69	5.83	37.17	-1.27
4	Aurobindo Pharm	11.25	6.26	55.63	4.09
5	Sun Pharma	17.66	40.41	228.80	-25.77
6	Glenmark	18.85	5.57	29.55	5.92
7	Torrent Pharma	16.83	5.56	33.04	2.05
8	Alkem Lab	15.04	4.16	27.68	-1.70
9	Piramal Enter	122.78	420.64	342.59	2.97
10	Divis Labs	28.51	5.75	20.17	0.85
11	Cadila Health	18.40	5.59	30.37	3.74
12	Ipca Labs	10.52	3.37	31.99	-5.01
13	GlaxoSmithKline	24.26	8.49	35.02	-5.16
14	Alembic Pharma	13.02	5.33	40.91	10.90
15	Abbott India	10.39	3.75	36.04	-6.18
16	Jubilant Life	7.69	6.74	87.69	-5.29
17	Biocon	21.70	10.07	46.39	-1.52
18	Sanofi India	15.84	2.81	17.74	-3.61
19	Wockhardt	6.20	20.25	326.55	-19.47
20	Strides Shasun	35.22	90.50	256.95	-4.65
21	Pfizer	20.80	14.65	70.45	6.95
22	Laurus Labs	8.29	2.88	34.80	14.37
23	Ajanta Pharma	9.75	13.05	133.81	38.06
24	Nectar Life	7.09	3.31	46.71	-2.64
25	Unichem Labs	13.29	4.33	32.58	-3.66
26	Granules India	5.91	2.25	38.02	6.30
27	JB Chemicals	18.90	21.70	114.81	-0.84
28	Indoco Remedies	10.05	2.27	22.58	-4.60
29	Aarti Drugs	5.30	1.10	20.70	1.61
30	Natco Pharma	15.12	5.83	38.59	10.48
31	Hikal	11.36	5.66	49.85	-7.32
32	FDC	18.28	3.21	17.57	1.81
33	Merck	6.55	2.82	43.05	3.32
34	Dr Lal PathLab	13.96	1.92	13.76	4.04
35	Orchid Pharma	1.09	15.79	1450.34	-32.05
36	Shilpa	12.99	4.62	35.55	6.67
37	Novartis India	16.44	4.73	28.80	-6.55
38	Panacea Biotec	-3.24	14.86	-458.88	-9.89
39	Ind-Swift Labs	1.39	9.87	708.10	-6.55
40	SMS Pharma	6.25	3.62	58.00	1.90
41	IOL Chemicals	1.25	6.71	537.25	-19.14
42	AstraZeneca	7.07	12.14	171.72	-7.46
43	Claris Life	15.96	13.33	83.52	17.50
44	Sterling Bio	-7.33	28.86	-393.94	-5.65
45	Neuland Lab	3.10	2.36	76.22	15.10
46	Suven Life Sci	12.71	7.47	58.75	2.90
47	Morepen Lab	-18.57	34.15	-183.94	2.79
48	Wanbury	-1.62	14.13	-869.96	-9.84
49	Venus Remedies	6.26	7.49	119.62	-9.87
50	Sequent Scienti	-0.92	11.31	-1226.52	6.04

VI. SUGGESTIONS

The companies should concentrate on their cost of production, investment in fixed assets and their sales

turnover to improve their profitability. They should utilize innovative technology to increase the product range and to increase the export sales. As far as selected enterprises are concerned, the management of the companies should contemplate its efforts in maximizing assets and minimizing liabilities, so that the company's financial position could be improved. Government should provide Tax benefits to flourish the Pharmaceutical industry, lenient policy should be followed to provide patent rights and should understand the critical role that pharma will play in boosting healthcare outcomes. Investing in biotech R&D has yielded higher returns.

VII. CONCLUSION

The Profitability of the firms plays a significant role in the successful management of a company. The analysis practically reveals that Net Profit Ratio, Leverage, Net Sales have significant effect on the Profitability of the selected Pharmaceutical companies during the study period. During the period of study there were a few ups and downs in the profitability but it did not affect the operations of the company to a great extent. If the Pharmaceutical Industry has to perform well, it has to invest more capital on R & D to generate more sales, only then it will improve its performance level. Pharmaceutical Sector has enormous opportunities of growth; this sector is on its boom stage, because the need for healthcare drugs is increasing day by day.

VIII. LIMITATIONS OF THE STUDY

Study exclusively depends on the published financial data, so it is subject to all limitations that are inherent in the condensed published financial statements. Pharmaceutical companies selected have been taken from moneycontrol database. The study covers a period of only eleven years from 2005 to 2017. The data collected is only for 50 companies and this might not be true representation of the population.

REFERENCES

- [1] Bhayani Sanjay: "Practical financial statement analysis" Raj publication,2003
- [2] Brigham, Eugene.F and Joel F. Houston. "Fundamentals of Financial Management, Ninth Edition, Harcourt College Publishers, Fort Worth, 2001.
- [3] Gitman, L.J., "Principles of Management finance," New York: Harper & Row publishers,1982, pp.381
- [4] Hunt W. and Donaldson, G., "Business Finance-text and cases", Illinois: Richard D.Irwin, 1965, pp.114-115.
- [5] Mukherjee Tarun K., Deo Prakash.Review of Business Research, 2007

APPENDIX I

List of companies

- [6] Parmar S.J.:“Financial Efficiency-Modern methods, tools & Techniques” Raj publication year of publication-2001
- [7] Patra, S. (2005). Liquidity Vs. Profitability. Indian Journal of Accounting, XXXV(2), 39- 43.
- [8] Paton & Paton., “Corporation Accounts and statements”, New York: Macmillan Company, 1964, pp.362.
- [9] Roy Chowdhar, A.B., “Analysis and Interpretation of Financial statements”, New Delhi Orient Longmans, 1970, pp.24.
- [10]Toby, A. J. (2007). Financial Management Modeling of the performance of Nigerian Quoted small and Medium-Sized Enterprises. Journal of financial management and Analysis, pp. 49-65.
- [11]Raghunathan, V., & Das, P. (1999). Corporate Performance: Post- Liberalization. The ICFAI Journal of Applied Finance, 5, pp.6-29.
- [12]Rajeswari. (2000). Liquidity Management of Tamil Nadu Cement Corporation Ltd, Alangulam- A Case Study. The Management Accountant, II(2), pp.377-378.

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1	Lupin	25	Unichem Labs
2	Cipla	26	Granules India
3	Dr Reddys Labs	27	JB Chemicals
4	Aurobindo Pharm	28	Indoco Remedies
5	Sun Pharma	29	Aarti Drugs
6	Glenmark	30	Natco Pharma
7	Torrent Pharma	31	Hikal
8	Alkem Lab	32	FDC
9	Piramal Enter	33	Merck
10	Divis Labs	34	Dr Lal PathLab
11	Cadila Health	35	Orchid Pharma
12	Ipca Labs	36	Shilpa
13	GlaxoSmithKline	37	Novartis India
14	Alembic Pharma	38	Panacea Biotec
15	Abbott India	39	Ind-Swift Labs
16	Jubilant Life	40	SMS Pharma
17	Biocon	41	IOL Chemicals
18	Sanofi India	42	AstraZeneca
19	Wockhardt	43	Claris Life
20	Strides Shasun	44	Sterling Bio
21	Pfizer	45	Neuland Lab
22	Laurus Labs	46	Suven Life Sci
23	Ajanta Pharma	47	Morepen Lab
24	Nectar Life	48	Wanbury
		49	Venus Remedies
		50	Sequent Scienti