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COMPARATIVE STUDY OF DOMESTIC AND FOREIGN PHARMACEUTICAL FIRMS IN INDIA-THROUGH LENS OF RATIO

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ABSTRACT

The Indian Pharmaceutical Industry is a US dollar 33 billion industry in 2017 and recognised as growth driver. The industry is the back bone behind maintaining the healthcare system of our country. The term performance can be judged from different angles according to the viewpoint of the different users of the same. When a financial analyst explains performance then that will be from profitability and growth perspective. But an economist will contradict the financial analyst by judging the performance from the viewpoint of maximum utilisation of resources with equal distribution of wealth and gains. The study tried to investigate financial strengths and weaknesses of the companies. Generally, the relationship between different items of profit and loss account and balance sheet are scrutinised to detect the financial health of the companies. Ratio Analysis is used in the study for performance analysis. The study scrutinised their financial performances taking into account unit level disaggregation. The analysis results are useful for the industry analysis and will facilitate industry predictors as well as academia.

KEYWORDS: Indian Pharmaceutical Industry, financial performance, ratio analysis, financial ratio.

INTRODUCTION

The word 'performance' cannot be defined specifically. In general, performance is nothing but completing a particular task by applying appropriate knowledge, ability and skills required by that task. Erich L. Kohlar has defined the term as "a part or to all of the conduct of activities of an organization over a period of time; often with reference to past or projected costs efficiency management responsibility or accountability or the like." The term performance can be Judged from different angles according to the viewpoint of the different users of the same. When a financial analyst explains performance then that will be from profitability and growth perspective. But an economist will contradict the financial analyst by judging the performance from the viewpoint of maximum utilisation of resources with equal distribution of wealth and gains. Again, the activity, in respect of which performance is to be measured also very important. Here we are concerned about companies'



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performance. There are also contradictions among different users. E.g. to the management growth of the company is the main measure for performance while to the investors or shareholders return/ profitability become the main measure. So, the emphasis should be given to both the sections at the time of assessing performance.

Performance analysis is the way of evaluating the completed task i.e. the performance by using various parameters. In our study, we are concentrating on financial performance analysis of the Indian Pharmaceutical industry. The act of performing financial activities is considered as financial performance and judging those financial activities is known as

financial performance analysis. Financial strengths and weaknesses of the companies are identified through financial performance analysis. Generally, the relationship between different items of profit and loss account and balance sheet are scrutinised to detect the financial health of the companies. Ratio Analysis is one of the most commonly used traditional systems of performance analysis.

LITERATURE REVIEW

The evaluation of financial performance has considerable significance in industry analysis. The financial reports prepared in the organisations are deemed to be an efficacious mechanism for analysing financial performance. The ratios are able to characterise the financial performance of the industry easily and briefly (Anderson et al., 2000).

The analysis assists in identifying the points of strengths and pitfalls and accordingly, activities taken for finding solutions. One common method used in order to assess the financial reports and conduct an unambiguous evaluation for effective treatment of the points of weakness is ratio analysis (Goyal, 2016).

Ratios are considered as guides or shortcuts, which are valuable in analysing the financial position and operations of an organisation by comparing the current year results with the past year results or with other organisations (Nuhu, 2014). The objective of ratio analysis is to ascertain those areas that require further investigation. Thus, ratio analysis has to be used in combination with a general insight into the organisation and its environment.

The users of the financial statements have been abetted by ratio analysis in finding out whether the financial condition of an organisation is improving or deteriorating over time (Adedeji, 2014). More precisely, the trend would succour the analysts in gaining an insight of whether the organisation is functioning on a favourable level or not. Moreover, with the help of ratio analysis, it becomes possible to ascertain the overall profitability of an organisation. By using this information, the management



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could assess the ability to meet its short-term as well as long-term obligations while maintaining optimal return.

In the research work of, it has been found that Ratio analysis is used to evaluate the past financial performance of an organisation as well as establish future trends related to its financial performance by formulating future plans for the organisation. Moreover, with the help of ratio analysis, it is possible to analyse the long-term debt paying ability of the organisation (Kaur, 2016). The prospective long-term creditors, investors are interested to gauge solvency position before undertaking investment decisions.

The method of ratio analysis only allows comparison with past periods or similar-sized organisations, since most ratios alone are not adequate to draw conclusions (Sakevych & Kobyletskii, 2015). A cross-sectional study is difficult to conduct, as the treatments of depreciation, share valuation; preference shares and goodwill vary from organisation to organisation. Furthermore, the financial statements do not disclose the effect of inflation on the reporting organisation. For instance, any property purchased years back might have increased value, while the same is stated at its original value in the balance sheet. During inflationary periods, cost of goods sold, depreciation and stock could distort the actual results badly.

Scope and Objective of this Paper

1) Analyse the financial performance of the Indian Pharmaceutical Industry. Especially this paper deals with the trends of financial ratios as an indicator of financial performance.

2) Inter-segment comparison to check the positioning of domestic companies with reference to foreign MNCs

Methodology

In this paper, we have made an in-depth study of ratio analysis and tried to analyse the financial performance of the studied companies with the help of financial ratios.

Sample

We have judged the performance of the industry by distributing it among two segments1. These segments are

- Foreign MNC segment
- Indian Large Bulk and Formulation segment

Data collection

Financial statement data required to calculate different ratios are collected for the period 1995-20172 from capitaline database.



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Tool for the study

The tool to analyse the financial performance used in this paper is ratio analysis.

The volatility of the companies is judged according to the standard deviation (S.D.) or coefficient variance (C.V.)

Mean values of ratios represent the positioning on the overall basis.

Operating Profit Margin

Indian Large Bulk and Formulation Companies

Table 1 exhibits the average operating profit margin of individual large bulk and formulation companies for the period 1995-2017 along with standard deviation (S.D.) and variance. We have highlighted the top 3 scores and bottom 3 scores in the table. After analysing the obtained results, it is clear that Sun Pharmaceutical Industries Limited has reported the highest operating profit margin (33.109 %) on an average throughout the period among the selected companies whereas Morepen Laboratories Ltd has the lowest operating profit margin (-3.681 %). The company has that average negative result because of its inability to generate profit for a long period started from 2003 to 2013. Form 2014 onwards it has started to recover from the prolonged loss-making position. Among the others, Cipla Ltd, Piramal Enterprises Ltd, J B Chemicals & Pharmaceuticals Ltd, FDC Ltd, Glenmark Pharmaceuticals Ltd, and Torrent Pharmaceuticals Ltd are on an average better performing companies. On the other hand, TTK Healthcare Ltd, Kopran Ltd, Lyka Labs Ltd, Alembic Ltd are considered as poor performers in consideration of others in the same segment. Companies' performance.

Table No 1: Summarised	Table No 1: Summarised Operating Margin Ratio					
Company Name	Mean	S.D.	C.V.			
Dr Reddys Laboratories Ltd (1)	17.454	8.506	48.732			
Sun Pharmaceuticals Industries Ltd (2)	33.103	7.258	21.926			
Cipla Ltd (3)	21.682	4.919	22.685			
Cadila Healthcare Ltd (4)	16.521	2.564	15.522			



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Aurobindo Pharma Ltd (5)	14.086	5.581	39.619
Wockhardt Ltd (6)	13.874	12.532	90.327
Glenmark Pharmaceuticals Ltd (7)	19.622	6.468	32.965
Torrent Pharmaceuticals Ltd (8)	19.202	6.666	34.716
Ipca Laboratories Ltd (9)	14.530	3.804	26.180
Piramal Enterprises Ltd (10)	20.699	12.796	61.821
Unichem Laboratories Ltd (11)	13.312	4.893	36.754
J B Chemicals & Pharmaceuticals Ltd (12)	20.544	19.553	95.176
FDC Ltd (13)	21.675	4.983	22.990
Natco Pharma Ltd (14)	19.342	4.983	25.764
TTK Healthcare Ltd (15)	6.050	2.992	49.457
Morepen Laboratories Ltd (16)	-3.681	27.222	739.529
Kopran Ltd (17)	7.478	12.844	171.762
Lyka Labs Ltd (18)	11.563	6.783	58.660
Alembic Ltd (19)	11.779	6.920	58.744
Ranbaxy Laboratories Ltd (20)	12.666	13.456	106.232

regarding operating profit margin shows a fluctuating trend over the study period. Standard deviation is highest for Morepen Laboratories Ltd (27.222) along with a very high C.V of 739.529 % and lowest for Cadila Healthcare Ltd (2.564) and (15.522%) respectively. During 2005 to 2012 the average performance of all studied large bulk and formulation companies have high volatility.

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Foreign Multinational Companies

Table No 2: Summarised Operating Margin Ratio							
Company Name	Mean	S.D.	C.V.				
Pharmacia Healthcare Ltd (1)	-1.961	15.021	766.001				
Astrazeneca Pharma India Ltd (2)	15.482	12.460	80.483				
Abbott India Ltd (3)	16.659	5.450	32.712				
Burroughs Wellcome (India) Ltd (4)	17.078	12.119	70.964				
Wyeth Ltd (5)	24.775	8.248	33.292				
Merck Ltd (6)	18.995	9.482	49.919				
Smithkline Beecham Pharmaceuticals Ltd(7)	15.166	2.391	15.768				
Fulford (India) Ltd (8)	5.999	8.596	143.307				
Glaxosmithkline Pharmaceuticals Ltd (9)	27.411	13.161	48.014				
Novartis India Ltd (10)	21.141	7.656	36.216				
Sanofi India Ltd (11)	19.817	6.967	35.155				
Organon (India) Ltd (12)	16.564	12.362	74.633				
Parke Davis (India) Ltd (3)	10.891	1.951	17.916				
Pfizer Ltd (14)	24.646	16.621	67.439				
Solvay Pharma India Ltd (15)	22.411	4.459	19.894				



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Fresenius Kabi Oncology Ltd(16)	3.042	25.066	823.933
Merck Specialities P. Ltd (17)	15.248	26.030	170.708
Astellas Pharma India P.Ltd(18)	-46.999	46.245	98.398
Source: Own Calculation			

In Table 2, the average operating profit margin of individual companies under the segment foreign MNCs, for the period 1995 – 2017 along with standard deviation (S.D.) and Coefficient of Variance (C.V) are presented. We have highlighted the top 3 scores and bottom 3 scores. After analysing the obtained results, it is clear that GlaxoSmithKline Pharmaceuticals Ltd has reported the highest operating profit margin (27.41 percent) on an average throughout the period among the selected companies. Apart from 2001 till 2005, the company shows a sustainable growth in operating profit margin, but from 2006 though it has maintained a margin above 20 percent, experiencing negative growth in operating profit margin as compared to earlier years. Whereas Astellas Pharma India Pvt Ltd has the lowest operating profit margin (-46.9985 percent). the company has that average negative result because of its inability to generate profit from its initiation. The company is still in wait to enter into the profit zone after overcoming the prolonged loss phase. Wyeth Ltd, Novartis India Ltd, Pfizer Ltd, and Solvay Pharma India Ltd are the outperformers among the foreign multinational pharmaceutical companies. Wyeth Ltd and Solvay Pharma India Ltd are no longer in the rat race as they got merged before few years. On the other hand, Pharmacia Healthcare Ltd, Fulford (India) Ltd, and Fresenius Kabi Oncology Ltd are poor performers in terms of profit margin. Pharmacia Healthcare Ltd had merged with other company while Fulford (India) Ltd and Fresenius Kabi Oncology Ltd are still struggling with profitability. Standard deviation is highest for Astellas Pharma India Pvt Ltd (46.25) and lowest for Parke Davis (India) Ltd (1.95). It has been observed from the obtained results that the outperformers of the segment have managed to maintain their S.D. below the mean whereas companies struggling with profit has greater S.D. due to negative mean we have negative C.V. ignoring the negativity Pharmacia Healthcare Ltd has the highest C.V. (766 %). SmithKline Beecham Pharmaceuticals Ltd has the lowest coefficient of variance (14.94%). **Current Ratio**

Large Bulk and Formulation Companies

Table 3. represents the average current ratio of individual large bulk and formulation companies for the period 1991-2017 along with standard deviation (S.D.) and coefficient variance (C.V). Throughout



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the studied period all companies are having a high current ratio. Cadila, Piramal, and Unichem are only companies who are able to maintain a current ratio near to ideal ratio (i.e. 2:1) throughout the study period. Other companies with an average current ratio close to ideal ratio have variation in maintaining the current ratio. Among the all studied companies Sun Pharma is having very high current ratios in all studied years. Even it has reached as high as 9.79 in 2007 and that lead to high S.D. for the period. In the initial period of our study, Ranbaxy was having high current ratio but from 2000 it came under 3 and even it became below 2 for a few years. Dr. Reddys also has high ratio till 2007 and then it has been

Table No 3: Summarised Current Ratio						
Company Name	Mean	S.D.	C.V.			
Dr Reddys Laboratories Ltd (1)	3.21	1.04	32.31			
Sun Pharmaceuticals Industries Ltd (2)	4.60	1.71	37.27			
Cipla Ltd (3)	2.78	0.60	21.56			
Cadila Healthcare Ltd (4)	2.37	0.68	28.61			
Aurobindo Pharma Ltd (5)	3.26	0.65	20.04			
Wockhardt Ltd (6)	2.72	0.78	28.66			
Glenmark Pharmaceuticals Ltd (7)	3.50	1.10	31.33			
Torrent Pharmaceuticals Ltd (8)	2.31	1.03	44.51			
Ipca Laboratories Ltd (9)	3.59	0.58	16.19			
Piramal Enterprises Ltd (10)	2.45	1.06	43.09			
Unichem Laboratories Ltd (11)	2.28	0.28	12.12			
J B Chemicals & Pharmaceuticals Ltd (12)	4.34	1.29	29.81			



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FDC Ltd (13)	2.21	0.85	38.28
Natco Pharma Ltd (14)	2.95	0.84	28.57
TTK Healthcare Ltd (15)	1.91	0.42	21.90
Morepen Laboratories Ltd (16)	3.58	2.75	76.78
Kopran Ltd (17)	2.80	1.64	58.51
Lyka Labs Ltd (18)	1.99	0.64	32.24
Alembic Ltd (19)	2.51	0.49	19.36
Ranbaxy Laboratories Ltd (20)	2.56	1.18	45.93
Source: Own Calculation	-		

moving around the ideal standard. Though Lyka has an average current ratio almost perfect as an ideal ratio, it has maintained a high ratio earlier but constantly dropping from 2008 and reaches 1.11 in 2017. TTK also has below 2 current ratios, constantly from 2002. Cipla Ltd, Aurobindo Pharma Ltd, and Glenmark Pharmaceuticals Ltd have maintained a higher ratio than the standard in each year of operation. Morepen has lacking liquidity since 2006. After analysing it has been revealed that on an average though Morepen has high ratio but it is in a weak position because that high ratio is for high current ratio in an earlier year and the company has the highest coefficient variance (76.78). Maximum companies with high average current ratio are trying to lower down their current ratio in recent times. Foreign Multinational Companies

The current ratio of the foreign multinational companies under study has been shown in table 4 The table represents the average current ratio of individual foreign MNCs for the period 1995-2017. The 1st column addressed the name of the companies, 2nd column means value of the current ratios, the next column exhibits standard deviation (S.D.) and the last column is about coefficient variance (C.V.). From the result, it is very much evident that the companies merged, amalgamated or taken over have very high or low current ratio before the

collaboration. Novartis India Ltd, Organon (India) Ltd, Pfizer Ltd are the companies which have more



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than 5 current ratios in several years of their operations. Novartis has maintained a balanced ratio in the initial years of study. But in 2006 it has crossed 3. And after that always have a high current ratio which has not dropped below 4 again. Organon (India) has high

Table No 4: Summarised Current Ratio						
Company Name	Mean	S.D.	C.V.			
Pharmacia Healthcare Ltd (1)	2.186	0.548	25.067			
Astrazeneca Pharma India Ltd (2)	2.057	0.653	31.766			
Abbott India Ltd (3)	1.916	1.097	57.277			
Burroughs Wellcome (India) Ltd (4)	2.628	1.106	42.094			
Wyeth Ltd (5)	3.099	0.652	21.034			
Merck Ltd (6)	2.946	0.968	32.856			
Smithkline Beecham Pharmaceuticals Ltd(7)	3.491	0.565	16.174			
Fulford (India) Ltd (8)	2.963	0.942	31.778			
Glaxosmithkline Pharmaceuticals Ltd (9)	2.095	0.835	39.871			
Novartis India Ltd (10)	3.499	1.418	40.532			
Sanofi India Ltd (11)	2.338	0.760	32.496			
Organon (India) Ltd (12)	4.170	1.271	30.470			
Parke Davis (India) Ltd (3)	2.143	0.572	26.709			
Pfizer Ltd (14)	3.107	1.485	47.776			
Solvay Pharma India Ltd (15)	2.479	0.723	29.185			



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Fresenius Kabi Oncology Ltd(16)	2.604	0.360	13.819
Merck Specialities P. Ltd (17)	2.435	0.303	12.463
Astellas Pharma India P.Ltd(18)	2.761	1.587	57.472
Source: Own Calculation			
* the year wise detailed Current Ratios of s	tudied foreign mult	tinational comp	anies appended

value but suddenly dropped to 1.92 in 2016. On the other hand, AstraZeneca Pharma India Ltd has maintained good current ratio for long but from 2011-12 the company is having a current ratio much lower than the standard. Abbott India Ltd has struggled a lot with its current ratio but from 2008 the company has managed to maintain high liquidity. One of the giant pharmaceutical company GlaxoSmithKline Pharmaceuticals Ltd also struggled with low current ratio after merging with SmithKline. But within a few years, it has managed the situation and till now maintaining more than sufficient liquidity. SmithKline Beecham Pharmaceuticals Ltd and Fresenius Kabi Oncology Ltd are only companies who have maintained a higher ratio than the standard in each year of their operation. Wyeth Ltd, Merck Ltd, and Merck Specialities Pvt Ltd also have high balanced liquidity except for the comparatively high ratio of Merck Ltd in a few years. Astellas Pharma India Pvt Ltd has maximum standard deviation (1.587) as well as coefficient variance (57.472) among all the studied foreign multinationals. Abbott, Novartis, and Pfizer also have high coefficient variance along with high standard deviation which indicates the variability in maintaining the current ratio in each year.

	Table	5: Year	wise Com	parison be	etween Fore	ign and D	omestic	firms		
		Cur	rent Ratio		Pı	ofitability]	Ratio	katio		
Segm ent	Foreign MNC		Large B Formu	Large Bulk and Formulation		Foreign MNC		Bulk d lation		
Year	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.		
1995	2.539	0.809	3.522	1.065	14.644	8.968	17.232	7.148		
1996	2.329	0.590	3.625	1.036	11.847	4.468	17.332	7.430		
1997	2.246	0.726	3.393	1.065	14.090	5.932	16.845	7.148		



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1998	2.094	0.739	3.292	1.367	13.471	5.695	16.469	5.821
1999	2.155	0.762	3.442	1.087	13.772	7.865	17.460	5.855
2000	2.245	0.813	3.313	1.193	15.228	6.665	18.145	5.325
2001	2.509	0.984	3.361	1.483	14.362	6.385	18.153	6.465
2002	2.313	1.055	3.155	1.316	15.252	11.049	18.408	7.143
2003	2.116	0.978	2.961	1.262	10.363	17.149	15.859	10.74 6
2004	2.576	1.234	2.879	1.352	22.483	8.595	15.433	12.06 7
2005	2.523	1.206	3.232	1.947	22.344	8.985	10.710	19.35 2
2006	2.945	1.262	3.078	1.721	26.103	13.058	12.555	13.59 9
2007	2.988	1.231	2.990	1.898	29.369	15.132	10.113	24.76 5
2008	3.210	1.124	2.778	1.531	32.658	15.075	13.118	16.41 0
2009	3.605	1.065	2.665	1.421	19.552	19.693	10.400	13.92 5
2010	3.312	1.015	2.593	1.232	18.973	12.378	16.254	11.19 0
2011	3.300	1.405	2.653	1.336	6.973	38.712	12.417	13.92 5
2012	3.682	1.358	2.367	0.955	8.926	31.112	18.720	23.57 7
2013	3.326	1.209	2.349	0.816	12.128	26.435	16.201	10.00 3
2014	2.820	1.005	2.407	0.905	8.721	16.233	16.840	8.049
2015	2.949	1.567	2.229	0.730	11.571	25.603	17.230	15.08 1
2016	2.837	1.401	2.288	0.748	14.341	23.031	17.042	8.637
2017	2.894	1.033	2.315	0.776	15.629	6.674	16.574	10.66 8

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]	Mean	2.761	1.068	2.908	1.228	16.209	14.560	15.631	11.49 3
	Sou	rce: Own	Calculation	n					

It is evident from table 5 that in terms of liquidity foreign firms are less volatile that is maintaining a certain level of working capital in comparison to domestic firms. Both the segments are having working capital level above the standard level. But in recent years domestic firms are squeezing working capital base which is a sign of good working capital management. On the other hand, turning to profitability ratio (here measured with operating profit margin) depicts a reverse result. Foreign firms are more volatile than domestic firms. In initial periods of the study the domestic firms have better profit margin but the period between 2004-2010 exhibited a sharp uptake of foreign firms. But the trend reversed from 2011 onwards. Foreign firms are trying to regain their profitability status. Data on profitability ratio of domestic firms revealed a stable state throughout the study period. Though profitability showed a downtrend in the interval of 2005 to 2009.

CONCLUSION:

In summary, the empirical investigation has revealed an optimistic scenario for both the segments. In any industry, coexistence of both domestic and foreign firms with competitive attitude is necessary for growth generation. The study scrutinised their financial performances taking into account unit level disaggregation. The analysis results are useful for the industry analysis and will facilitate industry predictors as well as academia. The study can be extended with incorporating more firms to pertain more accuracy in the analysis.

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