

Analyzing Profitability of Indian Pharmaceutical Sector: A Comparative Study of Select Domestic and Multinational Companies

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ABSTRACT

In mid-1991, the liberalization process that has been taken by the government of India, made a path to multinational companies (MNCs) to access the Indian markets resulting in tremendous competition in market. With the change in the economic scenario, a paradigm change in the Indian pharmaceutical industry has also become inevitable. International and national level mergers, acquisitions and takeovers have now become a common phenomenon in the pharmaceutical industry. In coming days, with the help of international financial companies the MNCs may capture and take control of Indian companies to exercise control over the Indian market. To match the situation created by international mergers and takeovers, Indian companies are adopting the same path. Some of them have been able to adapt themselves to the new situation while the others are struggling. So, it is high time to measure the profitability of the industry. In this backdrop, the present study seeks to make a comparison, particularly in respect of performance of different financial aspects, between multinational and domestic companies in the Indian pharmaceutical industry during the fifteen year period from 2003-04 to 2017-18. The sample size of the study consists of twenty pharmaceutical companies by taking ten companies from each of the multinational and domestic sectors. The issue has been tackled using appropriate statistical measures.

1. Introduction

Presently the pharmaceutical industry is recognized as one of the most flourishing industries in India. Its contribution towards the growth, development and welfare of the liberalized economy as well as forming a strong base of human resource in a country cannot be ignored. In fact, Indian pharmaceutical industry has been contributing to the social well-being of the country by performing a diversified role of inventing, developing, manufacturing and also distributing quality medicines. Since 1991, the globalization and liberalisation process of the Indian economy has made a way to multinational companies to access the Indian markets resulting in increased competition in market place. Liberalization of the Indian economy has also exposed the Indian pharmaceutical industry to such intensified competition from multinational corporations. The domestic companies have been forced to change their policies for managing difficulties arising out of tremendous competition in the post-liberalisation era. Some of them have been able to adjust themselves to the new situation while others failed to do so. Besides this, Indian pharmaceutical industry has experienced significant changes due to India's signing of Trade Related Intellectual Property Rights System agreement. In fact, the advent of GATT (WTO since 1995) has induced a series of changes in this industry. To be noted that the permission granted by the Central Government to the multinational companies to come to India with 100 per cent equity has also added more challenge to the domestic ones and hence, they have failed to continue their traditional practices but forced to reorient their strategies for managing difficulties arising out of tremendous competition in the post-liberalization era. In this backdrop, the present study seeks to make a comparison, in respect of earning capability, between multinational and domestic companies in the Indian

pharmaceutical sector during the period 2003-04 to 2017-18. The sample size of the study consists of twenty pharmaceutical companies by taking ten companies from each of the multinational and domestic sectors. The issue has been tackled using appropriate statistical measures.

2. Objectives and scope of the study

1. To compare the profitability of the selected multinational companies with that of the selected domestic ones.
2. To identify the best performer among the selected pharmaceutical companies in respect of earning capability.

3. Research methodology

The study is based on twenty companies in Indian pharmaceutical industry by taking ten leading companies from each of the multinational and domestic sectors. While making this selection, net sales revenue was considered as the selection criterion. The list of the companies displayed in Appendix. In this study purposive sampling procedure was followed. The data of the ten selected multinational companies and ten selected domestic companies in the Indian pharmaceutical industry for the period 2003-04 to 2017-18, used in this study were collected from secondary source i.e. Capitaline Corporate Database of Capital Market Publishers (I) Ltd. Mumbai. The data used in this study pertains to the calendar year figures of each year under study. Other secondary sources used in this study were CMIE reports, books, magazines, journals and research reports. For analyzing the data used in this study, simple mathematical tools like percentages, averages, ratios were used. The ratios relating to

the measurement of profitability which were used in this study are: Return on capital employed (ROCE), Return on net worth (RONW) and Profit before interest and tax (PBIT). In order to compare the selected multinational companies with the selected domestic companies in Indian pharmaceutical sector in respect of their financial performance more precisely, a comprehensive rank test considering both average and consistency of earning capability was applied. While making such comparison a composite score for each of the selected companies was ascertained by considering the final profitability rank.

4. Results and Discussion

In this part of the paper, overall profitability status of the selected multinational pharmaceutical companies was compared with that of the selected domestic pharmaceutical companies during the study period. For measuring the profitability status of the selected multinational as well as domestic companies more precisely a comprehensive rank test considering both average and consistency aspects was applied. While making such analysis three steps were undertaken.

In the first step, a comprehensive rank test considering the median values of all the selected profitability measures was made. In this test, a process of ranking was used to arrive at a more comprehensive measure of profitability in which median values of the selected three ratios, namely, ROCE, RONW and PBIT were combined in a points score. A high value of all selected profitability indicators indicates greater profitability and ranking was done in that order. Ultimate ranking was done on the basis of the principle that the lower the aggregate of individual ranks the more favourable is the profitability position and vice versa. Table 1 depicts that Glaxosmithkline which ranked first according to the average (median) PBIT, second according to the average(median) ROCE, and third according to the median RONW had a combined score of 6 in the composite ranking. Similarly, Astrazeneca had a combined score of 8, Wyeth 13, Sun 17, Abbott & Cipla 22, Wockhardth 23, Novartis 24, Merck & Sanofi 31, Pfizer 33, Lupin 35, Cadila 37, Ipca 39, Piramal 43, Aurobindo & Dr. Reddy's 44, Organon 45, Ranbaxy 54 and Fulford 59. According to the combined score based on the median values of the selected profitability measures Glaxosmithkline captured the highest rank and was followed by Astrazeneca, Wyeth, Sun, Abbott & Cipla, Wockhardth, Novartis, Merck & Sanofi, Pfizer, Lupin, Cadila, Ipca, Piramal, Aurobindo & Dr. Reddy's, Organon, Ranbaxy and Fulford respectively in that order. Based on the composite scores ascertained by using the median values of the selected profitability measures, four multinational companies found place in the first ten positions.

In the second step, the consistency in respect of overall profitability of the selected multinational and domestic companies was assessed by using the comprehensive rank test considering consistency coefficient (C.C.) of all the selected profitability ratios of each company during the study period. A high value of C.C. of each selected profitability measure implies a more consistency as well as favourable position in terms of profitability and thus ranking was done in that order. Ultimate ranking was done on the principle that the

lower the aggregate of individual ranks the more favourable is the profitability position and vice versa. Table 2 reveals that Abbott which ranked second according to the C.C. of ROCE and PBIT, fourth according to the C.C. of RONW had a combined score of 8 in the composite ranking. Similarly, Cipla had a combined score of 11, Novartis 12, Ipca 13, Lupin 16, Sun 16, Organon 25, Wyeth & Cadila 28, Glaxosmithkline & Merck 29, Pfizer 30, Astrazeneca 36, Sanofi 42, Aurobindo 44, Wockhardt 46, Dr. Reddy's & Piramal 50, Ranbaxy 55 and Fulford 59. According to the composite score based on the consistency in respect of profitability measured by the C.C. of the selected profitability indicators, Abbott captured the top most position and was followed by Cipla, Novartis, Ipca, Lupin, Sun, Organon, Wyeth & Cadila, Glaxosmithkline & Merck, Pfizer, Astrazeneca, Sanofi, Aurobindo, Wockhardt, Dr. Reddy's & Piramal, Ranbaxy and Fulford respectively in that order. According to the composite scores calculated with the help of the C.C.s of the selected profitability indicators two multinational companies and three domestic companies were placed in the first five positions.

In the third step, 'rank based on average' and 'rank based on consistency' for each of the selected companies (both multinational and domestic) were added to arrive at its sum of ranks which was ultimately used to ascertain its final profitability rank. Final profitability ranking was done on the principle that the lower the aggregate of 'rank based on average' and 'rank based on consistency', the more favourable is the profitability position and vice versa. Table 3 discloses that Abbott which ranked five and half according to 'average' and first according to 'consistency' had a combined score of 6.5 in the sum of rank. Similarly, Cipla had a combined score of 7.5, Sun 10, Novartis 11, Glaxosmithkline & Wyeth 11.5, Astrazeneca 15, Lupin 17, Ipca 18, Merck 20, Cadila 21.5, Pfizer & Wockhardt 23, Sanofi 23.5, Organon 25, Aurobindo 31.5, Piramal 32.5, Dr. Reddy's 34, Ranbaxy 38 and Fulford 40. Based on the combined score considering both the 'average' and 'consistency' parameters, Abbott captured the top most position and was followed by Cipla, Sun, Novartis, Glaxosmithkline & Wyeth, Astrazeneca, Lupin, Ipca, Merck, Cadila, Pfizer & Wockhardt, Sanofi, Organon, Aurobindo, Piramal, Dr. Reddy's, Ranbaxy and respectively in that order. Based on the final profitability rank arrived at by adding the 'rank based on average' and 'rank based on consistency' four multinational companies found place in the first five positions.

5. Conclusion

Based on the composite scores ascertained by using the median values of the selected profitability indicators, the majority multinational companies captured the upper ranks in respect of the average profitability as compared to the domestic companies. According to the composite scores measured on the basis of the C.C.s of the selected profitability indicators that there is no significant difference between multinational companies with domestic ones in respect of the consistency of the profitability. However, six multinational companies occupied first ten positions of overall profitability whereas only four domestic companies were able to capture such positions during the study period.

Tables

		Median of ROCE (%)	Rank	Median of RONW (%)	Rank	Median of PBIDTM	Rank	Sum of Ranks	Ultimate Rank
Multinational Companies	Abbott	42.51	3	31.46	2	16.91	17	22	5.5
	Astrazeneca	47.89	1	31.65	21	23.36	6	8	2
	Fulford	16.48	19	10.03	20	8.35	20	59	20
	Glaxosmithkline	45.15	2	30.71	3	31.34	1	6	1
	Merck	33.95	8	23.11	13	21.39	10	31	9.5
	Novartis	36.02	5	23.23	12	23.28	7	24	8
	Organon	30.83	9	21.67	17	13.58	19	45	18
	Pfizer	34.98	6	22.66	14	20.89	13	33	11
	Sanofi	34.73	7	22.50	15	23.19	9	31	9.5
Wyeth	40.80	4	28.36	6	24.85	3	13	3	
Domestic Companies	Aurobindo	19.67	17	24.97	9	15.04	18	44	16.5
	Cadila	20.32	16	24.42	10	21.22	11	37	13
	Cipla	30.66	10	25.70	8	24.42	4	22	5.5
	Dr Reddy's	16.63	18	14.73	18	23.27	8	44	16.5
	Ipca	23.58	12	24.19	11	18.27	16	39	14
	Lupin	20.86	14	27.89	7	20.59	14	35	12
	Piramal	20.57	15	21.89	16	21.14	12	43	15
	Ranbaxy	14.99	20	13.73	19	18.51	15	54	19
	Sun	27.01	11	30.47	4	31.04	2	17	4
Wockhardt	21.34	13	30.38	5	23.97	5	23	7	

Source: Compiled and computed from Capitaline Corporate Database, Capital Market Publishers (India) Ltd. Mumbai.

		Consistency (C.C.) in ROCE	Rank	Consistency (C.C.) in RONW	Rank	Consistency (C.C.) in PBIDTM	Rank	Sum of Ranks	Ultimate Rank
Multinational Companies	Abbott	4.88	2	4.11	4	5.70	2	8	1
	Astrazeneca	3.30	11	2.82	13	3.54	12	36	13
	Fulford	0.65	20	0.50	19	1.24	20	59	20
	Glaxosmithkline	4.00	9	4.37	3	2.68	17	29	10.5
	Merck	3.19	12	3.21	11	4.28	6	29	10.5
	Novartis	5.40	1	3.66	7	4.60	4	12	3
	Organon	4.49	5	3.40	9	3.56	11	25	7
	Pfizer	2.71	13	3.29	10	3.99	7	30	12
	Sanofi	2.68	14	2.48	14	3.45	14	42	14
Wyeth	4.24	7	3.94	5	2.89	16	28	8.5	
Domestic Companies	Aurobindo	1.77	16	1.79	15	3.46	13	44	15
	Cadila	4.45	6	2.91	12	3.66	10	28	8.5
	Cipla	4.09	8	4.52	2	10.55	1	11	2
	Dr Reddy's	1.59	18	1.32	17	3.24	15	50	17.5
	Ipca	4.53	4	3.71	6	5.34	3	13	4
	Lupin	4.81	3	3.41	8	4.54	5	16	5
Piramal	2.16	15	1.48	16	2.01	19	50	17.5	

Ranbaxy	1.10	19	1.17	18	2.34	18	55	19
Sun	3.64	10	5.24	1	3.77	8	19	6
Wockhardt	1.74	17	0.47	20	3.72	9	46	16

Source: Compiled and computed from Capitaline Corporate Database, Capital Market Publishers (India) Ltd. Mumbai.

Computation of Final Profitability Rank Considering Both the Average and Consistency Parameters of the Selected Liquidity Measures of the Selected Companies					
	Company	Ultimate Rank based on average	Ultimate Rank based on consistency	Sum of Ranks	Final Profitability Rank (FLR)
Multinational Companies	Abbott	5.5	1	6.5	1
	Astrazeneca	2	13	15	7
	Fulford	20	20	40	20
	Glaxosmithkline	1	10.5	11.5	5.5
	Merck	9.5	10.5	20	10
	Novartis	8	3	11	4
	Organon	18	7	25	15
	Pfizer	11	12	23	12.5
	Sanofi	9.5	14	23.5	14
Wyeth	3	8.5	11.5	5.5	
Domestic Companies	Aurobindo	16.5	15	31.5	16
	Cadila	13	8.5	21.5	11
	Cipla	5.5	2	7.5	2
	Dr Reddy's	16.5	17.5	34	18
	Ipca	14	4	18	9
	Lupin	12	5	17	8
	Piramal	15	17.5	32.5	17
	Ranbaxy	19	19	38	19
	Sun	4	6	10	3
Wockhardt	7	16	23	12.5	

Source: Compiled and computed from Capitaline Corporate Database, Capital Market Publishers (India) Ltd. Mumbai.

List of Companies under Study	
Multinational Companies	Abbott India Ltd. (Abbott)
	AstrazenecaPharma India Ltd. (Astrazeneca)
	Fulford (India) Ltd. (Fulford)
	Glaxosmithkline Pharmaceuticals Ltd. (Glaxosmithkline)
	Merck Ltd. (Merck)
	Novartis India Ltd. (Novartis)
	Organon (India) Ltd. (Organon)
	Pfizer Ltd. (Pfizer)
	Sanofi India Ltd. (Sanofi)
	Wyeth Ltd. (Wyeth)
Domestic Companies	AurobindoPharma Ltd. (Aurobindo)
	Cadila Healthcare Ltd. (Cadila)
	Cipla Ltd. (Cipla)
	Dr. Reddy's Laboratories Ltd. (Dr. Reddy)
	Ipca Laboratories Ltd. (Ipca)
	Lupin Ltd. (Lupin)
	Piramal Healthcare Ltd. (Piramal)
	Ranbaxy Laboratories Ltd. (Ranbaxy)
	Sun Pharmaceuticals Industries Ltd. (Sun)
Wockhardt Ltd. (Wockhardt)	