

EXAMINE THE PROFITABILITY OF SELECTED COMPANIES OF PHARMACEUTICAL INDUSTRY

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Abstract

Production, value, quantity, and units in the Indian pharmaceutical business are all on the rise, and two key elements seem to fit into the narrative of the whole expansion of the Indian economy. Second, the pharmaceutical business in India has undergone a significant structural change. India has finally finished the 10-year process of adopting a patent legislation, allowing the World Trade Organization to begin identifying foreign goods patents as of January 1, 2005. While they have long been producing generic versions of proprietary pharmaceuticals, Indian pharmaceutical companies will be unable to do so under the new regime. The pharmaceutical sector in India has been evaluated in this research. Ten years, from 2007-08 to 2016-17, are included in the analysis. The analysis found that pharmaceutical firms' profits peaked in 2008 and then declined precipitously in 2015.

Keywords: Pharmaceutical, financial performance, profitability, India

INTRODUCTION

Thirteen ranks first in terms of volume and third in terms of value among Indian medicines, according to Equity Master's Pharmaceuticals Sector Analysis study. Seventy percent to eighty percent of the market is made up of branded generics. In the pharmaceutical industry, India has risen to a major position on a worldwide scale. There is also a sizable population of scientists and engineers in the nation, giving them the resources, they need to advance the sector.

Ratios of various financial aspects are used as indications of how well or poorly a business is doing financially. The study's goal is to look at how various pharmaceutical companies in India are doing financially. Liquidity is the extent to which a company can satisfy its short-term maturing commitments within a year. Current account balances are the most liquid kind of financial assets. A firm is considered to have enough liquidity if its assets can be quickly transferred or sold with low transaction costs and little loss of value.

How well a company can make its financial commitments when they come due and how quickly it can respond to unexpected market possibilities is indicative of its liquidity. The capacity to satisfy current and future financial needs, increase assets, decrease obligations, and cover operational losses are all indicators of a company's liquidity. Acquisition and investment of money are the two primary divisions of financial management, as stated by Shapiro (2006). To that end, maximizing profits or shareholder value is an objective that should factor into financial management choices and responsibilities. Working capital management is the subset of financial management in charge of overseeing the company's cash, accounts receivable, and inventory (Beranek, 1966). In general, liquid assets provide lower returns than fixed ones, as stated by Assaf Neto (2003). Making investments in working capital does not result in increased output or revenue. "Liquidity management is crucial in good times and it gains additional significance in problematic times," writes Eljelly (2004), adding that "efficient management of a company's liquidity levels is of great relevance for the firm's profitability and well-being."

Before going up against other organizations with a similar focus, a business unit has to figure out where it excels. India's pharmaceutical sector is already a major player and is expanding quickly on a

worldwide scale. In terms of volume, it accounts for 20% of the world market, while in terms of vaccinations, it accounts for 50%. In terms of total output, India is third in the world and thirteenth in terms of value. India is home to more than 3,500 pharmaceutical businesses and 10,500 pharmaceutical production units, which together account for over 10% of world share in volume and 1.5% in value. The value of the domestic pharmaceutical market increased by 10.83% to reach US\$19.14 billion in 2019. India's contribution to the pharmaceutical industry is crucial. It boasts the greatest concentration of scientists and engineers, who together can guide the field to new heights. Hence, emphasizing the industry's weaknesses and strengths via intra-firm comparison amongst pharmaceutical businesses is necessary to enhance overall industry efficiency.

PHARMACEUTICAL SECTOR IN INDIA

In 2018, the pharmaceutical industry in India was estimated to be worth US\$ 36.7 billion. The pharmaceutical market in India generated INR 1,29,015 (US\$18.12 bn) in revenue in 2018, up 9.4 percent from INR 1,16,389 (US\$17.87 bn) in 2017. In the fiscal year ending in November 2019, the Indian pharmaceuticals industry was worth Rs 1.39 lakh crore, thanks in large part to the efforts of major players such as Lupin, Mankind Pharma, Intas Pharmaceuticals, and Alkem Laboratories. Indian pharmaceutical firms also saw 415 product approvals and 73 tentative approvals in 2018. Indian residents were able to save Rs 1,000 crore on medical costs because to the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP). The top three drug categories in terms of rolling annual sales in the Indian pharmaceutical market in 2018 were anti-infectives (13.6 percent), cardiovascular medications (12.4%), and gastrointestinal medications (11.5%). Drugs are exported to almost 200 nations from India, with the United States being the largest customer. India exports more than 20% of the world's total volume of generic pharmaceuticals, making it the largest provider in this industry. It is anticipated that growth will accelerate in the years ahead. Popular pharmaceutical exports from India include drug formulations, bulk pharmaceuticals, biologicals, intermediates, Ayurvedic and other herbal products, and surgical goods. As a result, India's total trade with the US in FY19 was US\$19.14 billion, and trade with the US through to November 2019 was US\$10.8 billion.

The Indian pharmaceutical business is expected to grow at a CAGR of 20% over the next five years, according to a report by Fitch Group's India Ratings. As of March 2014, 523 Indian pharmaceutical facilities have received FDA approval. In comparison to other countries, this was a lot. Sensex Broking has found that the domestic pharmaceutical market might grow by 10-12% in FY2015, up from 9% in FY2014. The domestic pharmaceutical industry had a growth rate of 11.9% in October 2014, according to the data. The pharmaceuticals market in Gujarat increased at a pace of 20 percent in November 2014, according to market research company AIOCD Pharmasofttech AWACS. This is much higher than the industry growth rate of 10.9 percent. Being part of India's larger biotechnology sector, this contributes to the country's projected \$7 billion in annual income by the decade's end. close to a dollar. BioFerma is an industrial association that brings in more than Rs 12,600 crore annually. This represents roughly 62% of total revenue. The bio-pharma industry covers everything from vaccinations to medical research and diagnostics.

The company's ability to align its product portfolio for chronic conditions including cardiovascular, anti-diabetes, anti-depressants, and anti-cancers will determine how much growth it experiences in domestic sales. Those in authority. In an effort to make healthcare more affordable, the government of India has introduced a number of programs. Indian pharmaceutical businesses stand to gain the most from the rapid introduction of generic pharmaceuticals. The focus on preventative immunizations and life-saving treatments as well as health initiatives in rural areas bodes well for India's pharmaceutical industry.

STATEMENT OF THE PROBLEM

Business and economic growth need access to capital. In the current situation, the company's financial

standing is used to inform and guide future business decisions, which are then presented to users. Using the information included in the financial statement, namely the balance sheet and the profit and loss account, a business may assess its current liquidity and profitability. As a result, it is able to make more profitable and liquid decisions. Statement of the Problem: Analyze the profitability and liquidity parameters of Indian pharmaceutical enterprises.

LITERATURE REVIEW

Raheman and Nasr (2017) Researchers discovered that a longer time needed to convert funds into usable form led to lower profits for the company, and that managers may generate shareholder value by cutting that time to its absolute minimum. "Financial Analysis of Pharmaceutical Companies in India". India's pharmaceutical sector may one day lead the globe in terms of output. The industry is presently the third largest by volume and the fifteenth largest by value. At 7-8 percent annually, it is one of the fastest-growing sectors of the country's economy.

Lazaridis and Tryfonidis (2016) Annual data analysis utilizing correlation and regression tests show that managers may boost company profitability by striking a balance between the cash flow needs of the business and the time it takes to collect, process, and disburse payments, invoices, and inventory purchases. The researcher has been given Keshab Das's writings and their political implications for travel in order to shed light on the situation. Robert Tancer, a professor, has done work promoting India's pharmaceutical business as an investment hotspot. Pharmaceuticals were Robert Warren's field of expertise.

According to Abhinna Srivastava's (2017) "Diagnosing Inter Firm Profitability of Pharmaceutical Industry: An Empirical Analysis for India," the top five pharmaceutical companies in India by market capitalization are performing well in terms of profitability measures, with Lupin edging out the competition and Sun Pharma coming out as the worst performer. Profitability of Selected Pharma Firms in India, a research by Dr. Bhavik U. Swadia (2018), compares and contrasts the financial health of many Indian pharmaceutical giants. This research spanned a decade, from the 2007–08 fiscal year to the 2016–17 academic year. According to the results of this research, the profitability of the pharmaceutical industry peaked in 2008 and has steadily declined through 2015. The second objective of WCM, as stated by Ravindra in his article "An Impact Evaluation of Working Capital Management on Profitability of Telecom Sector Companies in India," is to ensure that businesses can function effectively by allowing for significant movement of cash and the management of associated risks and returns. By balancing the need for profitability with the need for liquidity, businesses may achieve efficient working capital management.

Research by Sandhar et al. on the Indian cement industry (2013) The current ratio and liquid ratio are inversely related to the return on assets (ROA), return on investment (ROI), and cash turnover ratio in a regression study of profitability and liquidity. Mohammad and Syed, M.D. (2016) investigated the liquidity and profitability of chosen organizations, focusing on the comparison of the performance of these two metrics. In the pharmaceutical industry, Fast Ratio reveals a wide range of performance. In terms of profitability, Cipla has outperformed Dr. Reddy's laboratories. Liquidity Analysis of Selected Pharmaceutical Companies: A Comparative Research, undertaken by Ashok Kumar Panigrahi (2017), found that Ajanta Pharma has a superior liquidity ratio compared to its competitors during the years of 2012 and 2016. Having a healthy cash flow is essential for the success of other hand-picked pharmaceutical firms. His research indicates that the firms he chose to analyze do not have an adequate current and liquid ratio.

In their article "Liquidity Management and Corporate Profitability: Case Study of Selected Manufacturing Companies Listed on The Nigerian Stock Exchange" by Owolabi and Obida (2012), The authors make an effort to put a numerical value on the relationship between the two ideas by conducting an analysis of data gathered from a selection of the manufacturing businesses trading on

the floor of the Nigerian Stock Exchange. The study's primary result, gleaned through a descriptive analysis, is that a firm's profitability is strongly affected by its credit policies, cash flow management, and cash conversion cycle indicators. Company leaders may boost profits with a quick cash conversion cycle, sound credit practices, and careful cash flow management. Using a variety of financial ratios and statistical tests including correlation, mean, and standard deviation, evaluate the financial health and profitability of a few Indian cement enterprises. This study use profitability and liquidity ratios to analyze the impact of liquidity measures on the profitability performance of selected cement enterprises. The primary purpose of the author's research, entitled "Financial Analysis of Businesses in Criteria: A Profitability and Efficiency Focus," is to examine the liquidity situation of the firms and identify the variables responsible for such a position. Given that these institutions often have liquidity issues, it is safe to say that the liquidity situation was quite concerning. Their current asset to liability ratio is quite low; to improve it, they could either increase the level of current assets or reduce the quantity of current debts.

Data Analysis

Table 1 Gross Profit Margin Ratio

COMPANY	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Alembic Ltd	12.99	3.25	-13.94	-3.96	5.10	7.79	11.46	14.96	16.19	14.23
Ambalal Sarabhai Enterprises 104.55	-	-175.47	-72.83	-32.45	-32.79	-187.61	-74.13	-29.81	-29.52	-7.05
Cadila Healthcare Ltd	13.82	14.79	10.10	10.95	17.91	17.13	15.04	14.41	6.82	3.12
Coral Laboratories Limited	17.27	14.95	15.59	13.76	16.54	12.91	12.69	22.29	25.30	15.92
Dishman Pharmaceuticals & 27.90	27.27	24.44	17.10	27.41	31.35	20.95	23.75	21.80	25.21	
Gujarat Terce Laboratories 2.15	0.81	0.56	3.21	4.08	2.84	3.25	4.10	2.80	2.55	
Gujarat Themis Biosyn 16.73	5.80	-38.90	-15.90	2.24	-14.76	-0.07	-85.77	-3.50	4.36	
Lincoln Pharmaceuticals 7.87	7.22	6.53	6.04	8.35	8.03	9.81	8.11	6.91	7.71	
Sun Pharma Advanced 17.91	-23.09	-252.19	-16.46	-62.97	-34.47	-12.32	-	-	-	
Sun Pharmaceuticals -	-	-	-	9.86	0.79	6.01	26.73	27.81	-	
Themis Medicare Limited 7.39	2.32	-15.68	6.34	6.25	-0.03	7.73	8.05	1.31	8.84	
Torrent Pharmaceuticals 29.16	21.96	17.01	19.36	24.28	19.34	19.40	17.55	16.45	16.03	
Uniha Formulations Ltd. 1.60	1.89	1.45	2.63	-0.51	5.15	-0.49	-9.93	-53.16	-18.11	
Zenith Health Care Ltd. -15.23	-7.67	-2.84	-	-	-	-	-	-	-	7.27

The negative numbers for pharmaceutical businesses in 2012, 2015, and 2016 are clearly seen in the preceding chart and graph. This ratio indicates that the firm has the high cost of COGS relative to the revenue produced in recent years, and it was greater in the early years of pharma companies and will be considerably decreased in the years to come. As compared to the massive quantity of income, the

value of COGS has been decreasing from 2013–14 to 2015–16.

Table 2: ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	94894.76	13	7299.5969	8.3081718	1.529E-11	1.8077229
Within Groups	99282.306	113	878.60448			
Total	194177.07	126				

Thus, $F_{cal} > F_{tab}$ and p-value is less than specified α of 0.05.

The Null Hypothesis Is Refuted Due to Variation in the Gross Profit Margin Ratios of Representative Pharma Companies.

Table 3: NET PROFIT MARGIN

COMPANY	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Alembic Ltd	17.42	6.06	-9.58	-6.24	2.01	0.65	11.18	10.00	12.31	9.86
Ambalal Sarabhai	-99.78	-48.47	-24.26	-2.63	3.58	16.60	-11.61	-30.62	-5.87	-8.18
Cadila Healthcare Ltd	11.04	10.21	12.26	15.34	13.64	10.30	11.06	12.73	11.04	10.39
Coral Laboratories Limited	15.12	14.04	13.82	12.48	13.39	9.51	8.41	18.43	20.98	10.07
Dishman Pharmaceuticals	16.39	12.67	9.43	9.21	19.38	21.97	16.93	21.74	20.33	18.56
Gujarat Terce Laboratories	0.83	0.23	0.13	1.15	0.69	0.16	1.11	0.37	0.12	0.64
Gujarat Themis Biosyn	14.89	3.73	-44.72	-24.03	-6.93	-28.49	-10.99	-101.53	-14.27	-4.38
Lincoln Pharmaceuticals	5.44	5.01	2.79	3.25	4.87	3.82	5.24	4.84	4.41	4.09
Sun Pharma Research Comp	17.12									
		-25.30	-244.40	-14.47	-62.53	-25.93	-13.00	-	-	-
Sun Pharmaceuticals	-94.65	19.35	38.94	41.91	33.99	31.43	31.01	26.69	25.85	24.78
Themis Medicare Limited	0.87	-5.36	-24.73	4.35	8.39	-5.02	5.05	5.01	3.42	5.38
Torrent Pharmaceuticals	22.41	18.85	14.16	16.39	14.30	15.51	15.56	12.63	9.41	10.66
Uniba Formulations Ltd.	1.86	1.83	1.37	2.62	-1.24	3.95	-8.16	-15.57	-58.43	-21.99
Zenith Health Care Ltd.	-8.04	0.20	0.28	5.87	4.75	0.56	-3.07	-0.27	3.55	1.54

The preceding graphs and tables show that the amount has a zigzag pattern; this ratio represents the size of the net profit the firm has made. Due to the lack of a future project that would need investment or the need to demonstrate increased profit and pay dividends to shareholders, the ratio displays an amount of revenue equal to the net income earned. Financially, the pharmaceutical industry is at its

strongest in 2008 and at its poorest ever in 2015.

Table 4: ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	40185.211	13	3091.1701	4.3967559	4.501E-06	1.8005194
Within Groups	86476.013	123	703.05702			
Total	126661.22	136				

As a result, $F_{cal} > F_{tab}$, and the probability is lower than the threshold of 0.05. Hence, the difference in Net Profit Margin Ratio between the two groups of pharmaceutical businesses is significant, and the null hypothesis is rejected.

Table 5: Multiple Regression Analysis

Ratios	Model	R	RSquare	AdjustedR Square	Std.Error of Estimate
Operating Profit Ratio	1	.555(a)	.308	.193	9.47725
Gross Profit Ratio	1	.564(a)	.318	.204	9.39979
Net Profit Ratio	1	.572(a)	.327	.214	17.56343
Return on Capital Employed	1	.454(a)	.206	.074	8.42755
Return on Net Worth	1	.498(a)	.248	.122	11.29114
Return on Long Term Funds	1	.344(a)	.118	.029	8.99154

Table.1 displays the statistical significance of the model, the R² value at, from a multiple regression study of chosen pharmaceutical companies. The result at the 5% level of significance for the operating profit ratio indicates that the independent factors have a 30.8% effect on the dependent variable. At the 5% significance level, the independent factors have a 31.8 percent impact on the gross profit ratio dependent variable, and at the same level, they have a 32.7 percent impact on the net profit ratio dependent variable. Additionally, There is a significant relationship between the three independent variables and the dependent variable of return on capital employed (.206 for R²), between the independent variables and the dependent variable of return on networth (.248), and between the

independent variables and the dependent variable of return on long-term assets (.118 for R2).

Table 6: Summery Table of One-Way ANOVA for Profitability Ratios

Ratios	F-Value	Significant	Result
OperatingProfitRatio	2.423	.062	Rejected
GrossProfit Ratio	1.224	.314	Accepted
NetProfitRatio	.028	.998	Accepted
ReturnonCapitalEmployed	3.322	.018	Rejected
ReturnonNetWorth	5.392	.001	Rejected
Returnon LongTermFunds	9.040	.000	Rejected

Both the gross profit and net profit ratios in Table 2 above support the null hypothesis. So, these profitability measures are not related to one another in any meaningful way. Operating profit ratio is strongly correlated with ROCE, ROA, ROA on net worth, and ROA on long-term funds, all of which reject the null hypothesis.

Table 7: Summery Table of One-Way ANOVA for Liquidity Ratios

Ratios	F-Value	Significant	Result
CurrentRatio	5.452	.001	Rejected
Quick Ratio	3.976	.008	Rejected
DebtEquityRatio	2.023	.107	Rejected
LongTermDebtEquityRatio	1.609	.188	Accepted
InterestCoverageRatio	3.440	.015	Rejected
TotalDebttoOwner'sFund	2.200	.084	Accepted
FinancialChargesCoverageRatio	5.234	.002	Rejected

Total debt to owner's equity is a ratio for which the null hypothesis is acceptable. Hence, these liquidity ratios are not related to one another in any meaningful way. The null hypothesis is supported by all four of the aforementioned ratios: current, debt, equity, and interest coverage. As a result, these liquidity ratios are strongly correlated with one another.

CONCLUSION

The gross profit margin ratio in early pharma enterprises was considerably greater than it is today, which is likely the cause of the high cost of COGS compared to revenue collected in recent years. The cost of COGS has been falling faster than income from 2013-2014 through 2015-2016. In 2008, the financial situation of the pharmaceutical industry was excellent, and in 2015, it was the worst it had ever been. In 2008, pharmaceutical businesses retained more of their net profit from revenue growth, which suggests they do not plan to engage in any new projects or increase their profit and dividends to shareholders. Several pharmaceutical businesses have different gross profit margin to sales ratios. The ratio of chosen pharmaceutical businesses' net profit to their revenue varies widely.

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