Performance Evaluation of Biotechnology Companies in India



Visvesvaraya Technological University (keerthishivanand85@gmail.com) **T. Manjunatha** Visvesvaraya Technological University B D T College of Engineering

Keerthi S

(tmmanju87@gmail.com)

The study involves performance evaluation of Biotechnology Company in India. Data used for the study is the annual financial reports of Biocon and Vivo Biotech companies for the period from 2013 to 2017. We calculate financial ratios like liquidity ratios, leverage ratios, profitability ratios, turn over ratios and finally compare the performance of these two companies. Overall analysis shows that Biocon Ltd. is performing well when compared to Vivo Biotech Ltd. The empirical study shows that the company's performance evaluation can be done for comparison of companies which is useful for investment decision.

Keywords: Evaluation, Liquidity, Profitability, Efficiency, Turnover Ratios

1. Introduction

Financial performance analysis is the process of determining the operating and financial positions of firm. Efficient management of finance is very important for the success of any enterprise. Financial performance will determine firm's overall financial health over a given period of time and can be used to compare firms across the same industry or compare industries or sectors in aggregation. Indian Biotechnological industry has played a key role in promoting and sustaining development in the vital field of medicines and agriculture. These industries are engaged in the development and marketing of biological organisms and their products used for different processes. The ability of an organisation to analyse its financial position is essential for improving its competitive position in the marketplace. Further, it can also identify opportunities to improve its performance at the department, unit or organisational level.

Many researchers have studied about the financial performance in different fields; some of the authors such as **Hossan** (2010) evaluated the performance of pharmaceutical company in Bangladesh. Financial ratios of select pharmaceutical companies were evaluated and the results interpreted that Beximco is performing better than any other pharmaceutical companies in Bangladesh. Shah (2014) studied financial performance of private banks in Pakistan and observed that operational efficiency is negatively related with return on assets and positive relationship was found with assets management ratio and the bank size is positively related with interest income and asset management and operational efficiency is negatively related with interest income. Chashmi (2016) investigated the impact of the financial performance and growth opportunities on success or failure of listed companies in the Tehran stock exchange. It showed that there is significant relationship between earnings per share (EPS) and rate of return on assets (ROA) with success or failure, but there is no significant relationship between rate of return on equity (ROE) and success or failure, and there is no significant relationship between rate of return on equity (ROE) and success or failure, and there is no significant relationship between growth opportunities and success or failure. Rani (2017) suggested for the improvement of efficiency in the pharmaceutical companies by referring their financial reports. The studies compared between the growth rate of the companies in terms of turnover share capital, net worth and net assets. Ram (2017) analyzed the liquidity and short-term solvency position of the select pharmaceutical companies in India.

The studies found that the current ratio of Cipla Ltd., Lupin Ltd. and Piramal Enterprise Ltd. is holding more current assets compare to standard norms 2:1 ratio and the liquid ratio of Cipla Ltd. and Lupin Ltd. are maintaining more than the rule of 1:1. The results showed that liquidity position of the select firms is not satisfactory.

In this paper an attempt has been made to measure, evaluate and compare the financial performance of select Biotechnology companies in India using ratio analysis.

Objectives

• To know the liquidity, leverage, profitability and efficiency of select Biotechnology companies in India.

Data Sampling

In the present study, financial performance of two Biotechnology companies in India, that is Biocon Ltd. and Vivo Biotech Ltd are selected. The two companies are from Biopharma sector from different regions. It contributes 82% of the total Biotechnology industry. They are recognised for the development of large scale generation of therapeutics.

Methodology

Data required for the analysis is secondary in nature collected through annual financial reports of the respective company websites. The study period covers 5 years from 2013-2017 and the financial year starts from 1st April - 31st March. To analyse the data, we have used financial ratios to know the performance of these companies. The ratios used in performance studies are shown below.

Formula used

Current Ratio = Current Asset/Current Liabilities	(1)
Quick ratio = (Cash + Marketable Securities + Accounts Receivable) / Current Liabilities	(2)
Gross Profit Margin = Gross Profit/ Net Sales	(3)
Net Profit Margin = Net profit / Net Sales	(4)
Debt to Equity ratio = Total Debt /Total Equity	
Debt to Asset Ratio = Total Debt /Total Asset	
Asset Turnover Ratio = Cost of goods sold / Total Assets	
Debtors Turnover Ratio = Total Sales/ Debtors + Bills Receivable	

2. Results and Analysis

Ratio analysis interprets the financial statements so that the strengths and weaknesses of a firm, as well as its historical performance and current financial condition can be determined. The results obtained for the selected companies by the mathematical calculations are presented in Tables 1 and 2.

Table 1, shows the financial statement analysis of Biocon Ltd. It is observed that the company liquidity position is satisfactory. During the study period, current ratio is very high 2.45 in the year 2016 and lowest 1.65 in 2015 compared to other period of the study. This implies that Biocon have adequate current assets to pay its current liabilities. Similarly, quick ratio 1.53 in the year 2015 showcasing a satisfactory level and higher 2.41 in the year 2017. The average gross profit ratio in the study period is observed to be 17.2%. The highest gross profit of 20.8% observed in the year 2017 and the lowest 14.5% in the year in 2015. The average net profit ratio is 15.2%. The highest gross profit is 16% in the year 2013 and the lowest being 14% in 2014. The financial leverage position of Biocon Ltd. appears to be 0.321 in 2017 and in its previous year being 2.09. While, its total debt to asset ratio increased substantially 2.17 in the year 2014 and lowest 0.407 in the year 2016. The assets turnover ratio is 1.72 in the year 2013 and lowest 1 in the year 2017. We observe a decreasing condition in this parameter. The average debtor's turnover ratio is 3.85.

Table 2, shows the financial statement analysis of Vivo Biotech Ltd., liquidity position of Vivo Biotech Ltd. is unsatisfactory as it is below 1. In the study period ,current ratio 0.76in 2014 reaching a satisfactory level 1 in the year 2017. Quick ratio in the year 2015 is 0.50 ,indicating slow paying debts and 0.96 in the year 2017. Profit margin of Vivo Biotech Ltd is low .The average gross profit ratio is 3.8% in the study period, profit earned in the year 2015 is 1% and highest in the year 2017 reaching 8%. The highest net profit is 7.2% observed in the year 2017 and 1.5% in the year in 2013. The financial leverage position of Vivo Biotech Ltd. appears 3.25 in the year 2013 and 0.28 in the year 2017. While, it's total debt to asset ratio is constant in all the years at 0.77. The average assets turnover ratio is 0.514 and it is observed that asset turnover in the 2017 is 0.67 and the lowest being 0.39 in the 2013. The average debtor's turnover ratio of 4.9 is observed.

Year/Ratio	2013	2014	2015	2016	2017	Average	
Current Ratio	2.36	1.91	1.65	2.45	2.41	2.15	
Quick ratio	2.26	1.79	1.53	2.26	2.41	2.05	
Gross profit ratio%	18	18.3	14	16	20	17.2	
Net profit margin ratio%	16	14	15	15.4	15	15.2	
Debt to equity ratio	1.36	1.89	1.94	2.09	0.32	1.52	
Debt to asset ratio	2.04	2.17	0.60	0.40	0.41	1.13	
Assets turnover ratio	1.72	1.11	1.22	0.89	1	1.19	
Debtors turnover ratio	5.94	4.89	4.07	4.34	4.20	3.85	

Table 1 Financial Statement Analysis of Biocon Ltd. from 2013-2017

Table 2 Financial Statement Analysis of Vivo Biotech Ltd. from 2013-2017

Year/Ratio	2013	2014	2015	2016	2017	Average
Current Ratio	0.70	0.76	0.73	1.19	1.09	0.89
Quick ratio	0.56	0.69	0.50	0.80	0.96	0.70
Gross profit ratio %	5	3	1	2	8	4
Net profit margin %	2	2	3	3	7	3
Debt to equity ratio	3.25	0.28	0.29	0.32	0.28	0.88
Debt to asset ratio	0.78	0.77	0.78	0.75	0.77	0.77
Assets turnover ratio	0.39	0.42	0.45	0.64	0.67	0.51
Debtors turnover ratio	3.75	3.94	4.35	3.84	9.00	4.97

3. Conclusion

This paper investigates the performance of two select Biotechnology Companies in India, for the period 2013-2017. The Financial performance was evaluated on the basis of ratio analysis using liquidity, leverage, profitability and turn over ratios. The results show that Biocon Ltd. is in a better condition in maintaining its liquidity position than Vivo Biotech Ltd. Leverage ratios are satisfactory for both the companies. Profit margin of Biotech Ltd. is very good compared to Vivo Biotech Ltd. and can improve still. Biocon Ltd. is showing up an higher assets turnover ratio, implying an efficient management and utilisation of the assets, both the companies debtor turn over ratios are satisfactory and shows a better trade credit management. Finally, Business operations of Biocon Ltd. are performing better and it earns a satisfactory rate of returns for its shareowners, managing its assets and resources well.

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