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A STUDY OF PROFITABILITY ANALYSIS AT SELECTED PHARMACEUTICAL COMPANIES IN INDIA

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ABSTRACT

A firm's performance measurement has been the subject matter of discussion for decision makers as managers, planners, economists and academic staff since long many years. It is the process of measuring the results of a firm's policies and operations in monetary terms. Financial performance analysis includes analysis and interpretation of financial statements in such a way that it undertakes full diagnosis of the profitability and financial soundness of the business. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same companies or to compare companies or sectors in aggregation. Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, leverage performance, asset utilization performance and growth performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. In this paper an attempt has been made to analyze the profitability position of five leading pharmaceutical companies of India with the help of mean, standard deviation, co-efficient of variation, and analysis of variance. The results match with the earlier studies and the established theory of finance that the increase in profitability will not only yield greater efficiency but also improve financial performance in future. The study is conducted by taking into account of the data for five years from 2017 to 2021. The Pharmaceutical companies selected for study are Lupin, Glenmark, and Torrent. The financial performance of these companies are evaluated and found that the profitability of the selected pharmaceutical companies in India during the study period is satisfactory.

Keywords: Financial Analysis, Ratio, Pharmaceutical companies, Profitability Analysis.

1.Introduction

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt. Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance and social performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. In this context researcher has undertaken an analysis of financial performance of pharmaceutical companies to understand how management of finance plays a crucial role in the growth.

2.Statement of The Problem

The development of industries depends on several factors such as finance, personnel, technology, quality of the product and marketing. Out of these, financial and operating aspects assume a significant role in determining the growth of industries. All of the company's operations virtually affect its need for cash. Most of the data covering operational areas are however outside the direct responsibility of the financial executive. Unless the top management appreciates the value of a good financial and operating analysis, there will be continuing problems for the financial executives to find the profitability position of the concern. In this context the researcher is interested in undertaking an analysis of the financial performance of Pharmaceutical Companies. Hence, the present study entitled "An analysis of financial performance of Indian pharmaceutical companies" has been undertaken.

3. Review of Literature

Elijelly (2004) in the study on "Liquidity – profitability trade-off: An empirical investigation in an emerging market" empirically examined the relation between profitability and liquidity, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia. The study found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio." **Beneda (2006)** investigated returns, bankruptcies and firm distress for new US public companies



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that issued IPOs from 1995 through 2002. Beneda found that the average first year returns for IPO companies underperformed the market and that Ohlson's model was effective in identifying companies that had a higher probability of bankruptcy and financial distress and earned lower than average returns.

Raheman and Nasr (2006) discussed working capital management and its effect on liquidity as well as on profitability of the firm. They have studied the effect of different variables of working capital management including the Average collection period, Inventory turnover in days, Average payment period, Cash conversion cycle and Current ratio on the net operating profitability of Pakistani firms. Debt ratio, size of the firm (measured in terms of natural logarithm of sales) and financial assets to total assets ratio have been used as control variables. The results found that there is a strong negative relationship between variables of the working capital management and profitability of the firm. It means that the cash conversion cycle increases it will lead to decreasing profitability of the firm, and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level. They found that there is a significant negative relationship between liquidity and profitability. They also found that there is a positive relationship between size of the firm and its profitability. There is also a significant negative relationship between debt used by the firm and profitability.

Singh and Pandey (2008) suggested that, for the successful working of any business organization, fixed and current assets play a vital role, and that the management of working capital is essential as it has a direct impact on profitability and liquidity. They studied the working capital components and found a significant impact of working capital management on profitability for Hindalco Industries Limited.

Kevin and Young (2009) in their article, "Need Cash? Look Inside Your Company" had taken a hard look at the way company manages its working capital. He identified that a lot of capital tied up in receivables and inventory could be turned into cash by challenging the working capital practices and policies of the company. He had explored six common mistakes that companies make in managing working capital. He says that the simple act of correcting them could free up enough cash to make the difference between failure and survival in the current recession.

James Clausen (2009) in his article briefly expressed about the liquidity ratios. Investors and lending institutions will often use ratio analyses of the financial statements to determine a company's profitability and liquidity. If the ratios indicate poor performance, investors may be reluctant to invest. Therefore, the current ratio or working capital ratio, measures current assets against current liabilities. The current ratio measures the company's ability to pay back its short-term debt obligations with its current assets. He thinks a higher ratio indicates the company is better equipped to pay off short-term debt with current assets. Therefore, the acid test ratio or quick ratio, measures quick assets against current liabilities. Quick assets are considered assets that can be quickly converted into cash. Generally, they are current assets less inventory.

Gopinathan Thachappilly (2009) stated that even if a business has high profitability, it can face short-term financial problems and its funds are locked up in inventories and receivables not realizable for months. Any failure to meet the obligations can damage its reputation and creditworthiness and in extreme cases even lead to bankruptcy. In addition to, liquidity ratios are work with cash and near-cash assets of a business on one side, and the immediate payment obligations (current liabilities) on the other side. The near-cash assets mainly include receivables from customers and inventories of finished goods and raw materials.

Sherin (2010) in her article on "Liquidity v/s profitability - Striking the right balance" writes about the implications of liquidity and profitability in a pharmaceutical company. A firm is required to maintain a balance between liquidity and profitability while conducting its day-to-day operations. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers. A proper management of the same could result in the desired impact on either profitability or liquidity.

Rohit and Vipin (2012) investigated on determinants of corporate liquidity in India for a sample of 100 firms in Indian market over the period 1999-2008. It was found that size of firm has no impact on liquidity.

Sandhar et.al (2013) examined the relationship between liquidity and profitability of selected Indian cement companies using regression analysis and revealed that current ratio and liquid ratio are negatively associated with return on assets (ROA), return on investment (ROI) and cash turnover ratio is negatively associated with ROI and ROA.

Neeraj and Devesh (2013) studied liquidity position and impact on profitability of Tata Steel and steel authority of India. The study found that liquidity position can be improved with the help of low average collection period and average collection can be reduce by proper coordination between sale, production and finance department, lastly conclude that study found positive impact of liquidity position on profitability with the help of various techniques.

Ashok Kumar (2013) studied liquidity position of five leading companies which cover period of 10 years from 2000-2010. It has been found that the liquidity position of small companies are better as compared to big ones. Lastly, it is concluded that companies should maintain an ideal current and liquid ratio.

Sarvanan and Abarna (2014) conducted study on liquidity analysis of selected automobile companies in India using Anova and found that there is significant difference among the absolute liquid ratios of the selected automobile companies.



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V. Vijayalakshmi and M. Srividya (2014) in their study stated that the financial health plays a significant role in the successful management of a company. The analysis practically reveals that gross profit ratio, operating ratio, return on equity capital, and earnings per share, have significant effect on the net profit ratio of the selected pharmaceutical companies during the study period. However, profitability of the selected pharmaceutical companies in India during the study period is satisfactory. 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 and has to do more sales, only then it will improve its performance level.

Mohmad and Dr. Syed (2016) analyzed the liquidity and profitability of selected companies and more specifically it seeks the comparison between the liquidity and profitability performance of selected companies. There is significant difference between the performances of pharmaceutical companies on the basis of Quick Ratio. The performance of Cipla is better than that of Dr. Reddy's labs in terms of profitability.

4.Objectives of the Study

The following are the specific objectives of the study

1. To analyse the profitability position of selected Pharmaceutical Companies in India.
2. To analyse the factors influencing the profitability of selected Pharmaceutical Companies in India.
3. To offer findings and suggestions and conclusion of this study.

4.Scope of the Study

The present study aims at assessing the profitability position of selected pharmaceutical companies in India. The study could help the company as well as the investors to understand its financial efficiency. It aims to help the management to find out its financial problems at present and the specific areas in the business, which might need some effort for more effective and efficient utilization of its resources. The study is conducted for a period of five years for selected companies.

5.Sources of Data: Secondary data is used for the study. The required data for the study is collected and compiled from www.moneycontrol.com for the period from 2017 to 2021 which is a reliable and empowered corporate database. In addition to this, supportive data is collected from books, journals, annual reports and various news-papers.

6.Research Methodology

The methodology adopted to analyse is through ratio analysis, and interpret general financial statements to assess the profitability position. Further a comprehensive analysis is carried by applying statistical techniques namely mean, standard deviation, co-efficient of variance and analysis of variance.

7.Sample Design

As the complete source list of all the Pharmaceutical Companies is not available, the data for this study is selected based on convenience sampling method. Among the companies listed with major stock exchange of India namely, Bombay Stock Exchange and National Stock Exchange of India, 3 companies with consistent financial data are selected. Certain companies are excluded owing to irregular and/or inconsistent financial data support.

The following are the selected pharmaceutical companies of the study

1. Lupin
2. Glenmark
3. Torrent

8.Period of the Study

The study covers a period of five years from the financial year 2017 to 2021

9.Analysis of Profitability

The profitability of the selected companies is measured with the help of the following ratios, and the results are interpreted:

1. Gross Profit Ratio
2. Net Profit Ratio
3. Operating Profit Ratio
4. Return on Equity



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Table: -1 profitability ratios of Lupin Ltd (In Rs. Cr.)

| Years | Gross Profit | Net Profit | Return on Equity | Operating profit Ratio |
|-------|--------------|------------|------------------|------------------------|
| 2017 | 19.65 | 11.38 | 6.77 | 15.1 |
| 2018 | 21.61 | 6.59 | 4.16 | 16.9 |
| 2019 | 27.68 | 13.55 | 8.98 | 23.93 |
| 2020 | 21.99 | 13.33 | 8.51 | 18.12 |
| 2021 | 36.23 | 24.87 | 21.25 | 33.33 |
| Mean | 25.43 | 13.94 | 9.93 | 21.48 |
| SD | 6.74 | 6.72 | 6.60 | 7.41 |
| CV | 3.78 | 2.08 | 1.50 | 2.90 |

Source: Compiled and Calculated from the data published in www.moneycontrol.com

Table: -1 reveals the gross profit of Lupin pharmaceutical company in India from 2017 to 2021. the profitability ratio shows a fluctuating trend during the period of the study. this fluctuation implies inability to keep the gross profitability ratio.

Table: -2 Profitability ratios of Glenmark Pharma Ltd. (In Rs. Cr.)

| Years | Gross Profit | Net Profit | Return on Equity | Operating profit Ratio |
|-------|--------------|------------|------------------|------------------------|
| 2017 | 30.21 | 21.79 | 11.13 | 28.22 |
| 2018 | 28.46 | 20.17 | 10.24 | 26.4 |
| 2019 | 28.59 | 25.72 | 13.58 | 26.91 |
| 2020 | 23.75 | 15.77 | 9.76 | 21.91 |
| 2021 | 37.63 | 26.44 | 22.68 | 36.34 |
| Mean | 29.73 | 21.98 | 13.48 | 27.96 |
| SD | 5.03 | 4.35 | 5.35 | 5.25 |
| CV | 5.91 | 5.05 | 2.52 | 5.32 |

Source: Compiled and Calculated from the data published in www.moneycontrol.com

Table 2 reveals the gross profit of Glenmark Pharma Ltd in India from 2017 to 2021. the profitability ratio shows a fluctuating trend during the period of the study. this fluctuation implies inability to keep the Avg. gross profitability ratio is 29.73, Avg. net profit ratio is 21.98, avg. return on equity ratio is 13.48 and operating profit ratio is 27.96.

Table: -3: Profitability ratios of Torrent Ltd (In Rs. Cr.)

| Years | Gross Profit | Net Profit | Return on Equity | Operating profit Ratio |
|-------|--------------|------------|------------------|------------------------|
| 2017 | 29.56 | 11.25 | 12.92 | 19.54 |
| 2018 | 27.28 | 9.21 | 13.47 | 18.13 |
| 2019 | 25.45 | 6.85 | 9.95 | 16.49 |
| 2020 | 29.05 | 8.05 | 11.98 | 19.34 |
| 2021 | 26.30 | 4.34 | 6.28 | 16.36 |
| Mean | 27.53 | 7.94 | 10.92 | 17.97 |
| SD | 1.76 | 2.59 | 2.92 | 1.51 |
| CV | 15.68 | 3.07 | 3.74 | 11.88 |

Source: Compiled and Calculated from the data published in www.moneycontrol.com

table-3 reveals the gross profit of Torrent Ltd in India from 2017 to 2021. the profitability ratio shows a fluctuating trend during the period of the study. this fluctuation implies inability to keep the Avg. gross profitability ratio is 27.53, Avg. net profit ratio is 7.94, avg. return on equity ratio is 10.92 and operating profit ratio is 17.97.



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10. Testing of Hypothesis

H₀: there is no significant between gross profit and selected companies

H_a: there is a significant between gross profit and selected companies

Table: -4 One Way ANOVA of the Gross profit selected companies

| ANOVA | | | | | | |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS | df | MS | F | P-value | F crit |
| Between Groups | 46.14805 | 2 | 23.07403 | 0.938022 | 0.418305 | 3.885294 |
| Within Groups | 295.1832 | 12 | 24.5986 | | | |
| Total | 341.3313 | 14 | | | | |

Source: Compiled and Calculated from secondary data

Table 4 shows the one-way ANOVA of the selected companies calculated F value of the variables such as 0.938022 and p value is 0.418305 which are greater than the 0.05, F critical value of 2.866 at 5 per cent significant level. So, there is a significant relationship between profitability ratios.

Table: -5 One Way ANOVA of the Net profit selected companies

| ANOVA | | | | | | |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS | Df | MS | F | P-value | F crit |
| Between Groups | 496.0977 | 2 | 248.0488 | 10.51612 | 0.002299 | 3.885294 |
| Within Groups | 283.0498 | 12 | 23.58748 | | | |
| Total | 779.1475 | 14 | | | | |

Source: Compiled and Calculated from secondary data

Table 5 shows the one-way ANOVA of the selected companies calculated F value of the variables such as 10.51612 and p value 0.002299 which are less than the 0.05, F critical value of 3.885294 at 5 per cent significant level. So, there is no significant relationship between net profit ratios.

Table: -6 One Way ANOVA of the Return on equity selected companies

| ANOVA | | | | | | |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS | Df | MS | F | P-value | F crit |
| Between Groups | 576.8324 | 2 | 288.4162 | 12.50249 | 0.001163 | 3.885294 |
| Within Groups | 276.8244 | 12 | 23.0687 | | | |
| Total | 853.6568 | 14 | | | | |

Source: Compiled and Calculated from secondary data

Table 6 shows the one-way ANOVA of the selected companies calculated F value of the variables such as 12.50249 and p value 0.001163 which are less than the 0.05, F critical value of 3.885294 at 5 per cent significant level. So, there is no significant relationship between net profit ratios.

Table: -7 One Way ANOVA of the Return on equity selected companies

| ANOVA | | | | | | |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS | Df | MS | F | P-value | F crit |
| Between Groups | 33.45916 | 2 | 16.72958 | 0.621639 | 0.553496 | 3.885294 |
| Within Groups | 322.9448 | 12 | 26.91207 | | | |
| Total | 356.404 | 14 | | | | |

Source: Compiled and Calculated from secondary data



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Table7 shows the one-way ANOVA of the selected companies calculated F value of the variables such as 0.621639 and p value 0.553496 which are greater than the 0.05, F critical value of 3.885294 at 5 per cent significant level. So, there is a significant relationship between return on equity ratio.

Table: -8 One Way ANOVA of the Operating profit selected companies

| ANOVA | | | | | | |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS | df | MS | F | P-value | F crit |
| Between Groups | 256.5811 | 2 | 128.2906 | 4.541584 | 0.033999 | 3.885294 |
| Within Groups | 338.9757 | 12 | 28.24798 | | | |
| Total | 595.5568 | 14 | | | | |

Source: Compiled and Calculated from secondary data

Table 8 shows the one-way ANOVA of the selected companies calculated F value of the variables such as 4.541584 and p value 0.033999 which are less than the 0.05, F critical value of 3.885294 at 5 per cent significant level. So, there is no significant relationship between operating profit ratios.

11. Findings

- The Lupin pharmaceutical company Avg. gross profitability ratio is 24.43, Avg. net profit ratio is 13.94, avg. return on equity is 9.93 and operating profit ratio is 21.48.
- The Glenmark Pharma Ltd Avg. gross profitability ratio is 29.73, Avg. net profit ratio is 21.98, avg. return on equity ratio is 13.48 and operating profit ratio is 27.96.
- The Torrent Ltd in India Avg. gross profitability ratio is 27.53, Avg. net profit ratio is 7.94, avg. return on equity ratio is 10.92 and operating profit ratio is 17.97.
- There is no significant relationship between net profit ratios of selected pharmaceutical companies
- There is no significant relationship between net profit ratios. of selected pharmaceutical companies
- There is a significant relationship between return on equity ratio of selected pharmaceutical companies
- There is no significant relationship between operating profit ratios of selected pharmaceutical companies.

12. Conclusion

Financial management has great importance in making management decisions. The financial soundness of a company can be achieved maintaining liquidity and profitability of the company. The purpose of this study was to measure the financial performance i.e. profitability of the selected pharmaceutical companies. The analysis practically reveals that gross profit ratio, operating ratio, return on equity capital, and earnings per share, have significant effect on the net profit ratio of the selected pharmaceutical companies during the study period. However, profitability of the selected pharmaceutical companies in India during the study period is satisfactory. During the period of study there were a few ups and downs in the profitability but it did not affect the operations of the companies to a great extent. If the Pharmaceutical Companies has to perform well, it has to invest more capital and has to do more sales, only then it will improve its performance level.

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