# FINANCIAL ANALYSIS OF PHARMACEUTICAL COMPANIES USING RATIOS

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#### **ABSTRACT**

India is the largest provider of generic drugs globally. The Indian pharmaceutical sector supplies more than 50% of global demand for different vaccines, 40% of US generic demand and 25% of all medicines in UK. India's domestic market turnover in 2019 amounted to Rs 1,4 lakh crore (USD 20,03 billion), with Rs 129,015 crore (USD 18.12 billion) growing by 9,8% year-on-year (in Rs) in 2018. India has an important role in the world pharmaceutical industry. The country also has a large pool of scientists and engineers who are able to push the industry to a higher level. Today, more than 80% of the antiretroviral used globally in the fight against AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical companies. This article aims to discuss the financial position of the pharmaceutical companies with special reference to working capital management using ratio analysis technique.

Keywords: Ratios, Working Capital, Operational Efficiency, Financial Analysis.

## Introduction

India's domestic pharmaceutical market turnover reached Rs 1.4 lakh crore (US\$ 20.03 billion) in 2019, growing 9.8 per cent year-on-year (in Rs) from Rs 129,015 crore (US\$ 18.12 billion) in 2018. Medicine spending in India is projected to grow 9-12 per cent over the next five years, leading India to become one of the top 10 countries in terms of medicine spending. India's cost of production is significantly lower than that of the US and almost half of that of Europe. It gives a competitive edge to India over others. The Indian pharmaceuticals market stood at Rs 1.39 lakh crore (US\$ 19.89 billion) for the year ending November 2019 with Lupin, Mankind Pharma, Intas Pharmaceuticals and Alkem Laboratories leading the growth. In November 2019, the Indian pharmaceutical sales grew by 14.5 per cent year-on-year. Indian pharma companies spend 8-13 per cent of their total turnover on R&D. Expenditure on R&D is likely to increase due to the introduction of product patents; companies need to develop new drugs to boost sales.47 per cent of top pharmaceutical companies in India are now providing tools for clinical decision support and 33 per cent are providing virtual caregiving support. India's pharmaceutical export market is thriving due to strong presence in the generics space. Pharmaceuticals exports from India stood at US\$ 19.14 billion in FY19 and expected to reach US\$ 22 billion in FY20.

### Objectives of the Research

The following are the specific objectives of the study:

- To study the financial analysis and operational efficiency of pharmaceutical company.
- To study the recent changes in the financial position of the prominent pharmaceutical company.

## Financial and Statistical Techniques of Analysis

Ratio analysis is a technique adopted to analysis and interpret general financial statements to assess the working capital position. The following are the selected Pharmaceutical companies of this study are Aurobindo Pharma, Cipla, Glaxo Smith, Kline Pharma, Lupin PharmaSun Pharma Industries. The study covers a period of five years from the financial year 2014-2015 to 2018-2019.

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## **Findings & Conclusion**

Indian pharma sector is having the highest profitability and the high working capital requirement for the raw material, employees & labor remuneration and other production direct and indirect activities. Working capital is a corporate efficiency and liquidity measure. Working capital is generally calculated by removing existing liabilities from current assets. It is an important indicator of the company's ability to continue its regular operations without additional liabilities. The correct management of working capital is expected to contribute positively to the value of the firm, and the liquidity of the company negatively affects the company's profitability.

On the basis of the last 6 years' balance sheets and of the employee's response it has been found that working capital for some of the companies are having positive relationship with profitability and some are not having negative relationship. But the trend can be analyzed using the correlation regression for the future also in general. The working capital practices in the pharma companies are quite alike and they are more focused on working capital management using the operating cycle method. The last six year changes has been described below of the companies taken for study.

The Aurobindo Pharma operating profit, PBIT, cash profit margin, net profit current ratio is ok and this further can be improved if some suitable measures are taken.

Looking at the PBIT, Cash profit margin, Current Ratio, Quick Ratio, Interest Cover Ratio, debtor's turnover ratio, number of days in working capital, earning retention ratio, cash earnings retention ratio is increasing from year to year. On the other hand, some of the rations such as Debt Equity ratio, Net profit margin, Long Term debt, Inventory Turnover Ratio, Interest Cover Ratio slightly decreased or remains same.

Profit before interest and tax margin has been changed from 18.26 million to 16.63 million, Cash profit margin has been changed from 15.58 million to 16.55 million, Net profit margin has been changed from 13 million to 12.25, current ratio has been changed from 1.2 million to 0.97 million, quick ratio has been changed from 1.33 million to 1.35 million, debt equity ratio has been changed from 0.75 million to 0.32 million, long term debt equity ratio has been changed from 0.26 million to 0, interest cover has been changed from 14.56 million to 24.69 million, inventory turnover ratio has been changed from 3.4 million to 3 million, debtor's turnover ratio has been changed from 3.93 million to 5.98 million, number of days in working capital has been changed from 150.09 million to 134.06 million, material cost composition has been changed from 49.16 million to 42.58 million, earning retention ratio has been changed from 90.06 million, cash earnings retention ratio has been changed from 91.79 million to 100 million.

As shown in figure 1.165 the working capital of the **Cipla Limited** has been continuously increased from Rs.1065.18 million to Rs.310.7 million from 2015 to 2019 but in year 2020 there was a sudden fall in the working capital that is due to fall in current assets and rise in the current liabilities. The overall working capital position of the Cipla Limited was good till year 2019 but there was a change in the position in the year 2020. Therefore, the company should require to manage in working capital properly in the future.

The change in current assets is there because of inventories has been increased from Rs. 8841.23 million to Rs. 4377.6 million. The investments have been increased from Rs. 8841.23 million to Rs. 1016.52 million, trade receivables have been increased from Rs. 8841.23 million to Rs. 3891.31 million, cash and cash equivalents has been increased from Rs. 0 to Rs. 742.38 million, the bank balances other than cash and cash equivalents has been increased from Rs. 8841.23 million to Rs. 261.53 million The loans have been increased from Rs. 8841.23 million to Rs. 5.6 million, the other financial assets have been increased from Rs. 0 to Rs. 522.28 million, the other current assets have been increased from Rs. 8841.23 million to Rs. 886.62 million, the total current assets have been increased from Rs. 8841.23 million to Rs. 4703.84 million, the borrowings have been increased from Rs. 7776.05 million to Rs. 447.15 million, the trade payables have been increased from Rs. 0 to Rs. 0, the total outstanding dues of micro enterprises and small enterprises has been increased from Rs. 7776.05 million to Rs. 81.19 million, the total outstanding dues of creditors other than micro enterprises has been increased from Rs. 7776.05 million to Rs. 2200.62 million, the other financial liabilities have been increased from Rs. 0 to Rs. 530.36 million, the other current liabilities have been increased from Rs. 7776.05 million to Rs. 176.29 million, the provisions have been increased from Rs. 7776.05 million to Rs. 948.19 million, the income tax liabilities have been increased from Rs. 0 to Rs. 9.34, the total current liabilities have been increased from Rs. 7776.05 million to Rs. 4393.14 million.

Looking at the ration of the Cipla Limited such as PBIT, Cash profit margin, Current Ratio, Quick Ratio, Interest Cover Ratio, Long Term debt equity ratio, Debt Equity ratio, earning retention ratio, cash earnings retention ratio, Inventory Turnover Ratio, Interest Cover Ratio is increasing from year to year whereas Net profit margin debtor's turnover ratio number of days in working capital, material cost composition are slightly decreased or remains same.

Operating profit margin has been changed from 19.05 million to 18.71 million This shows that there is no significant change in the operating profit margin, profit before interest and tax margin has been changed from 14.39 million to 11.62 million. Cash profit margin has been changed from 15.28 million to 15.57 million net profit margin has been changed from 10.4 million to 9.02 million current ratio has been changed from 1.73 million to 2.06 million, quick ratio has been changed from 1.27 million to 1.48 million, debt equity ratio has been changed from 0.16 million to 0.18 million, long term debt equity ratio has been changed from 0.03 million to 0.15 million, interest cover has been changed from 10.83 million to 12.04 million, inventory turnover ratio has been changed from 3.03 million to 3.91 million debtor's turnover ratio has been changed from 6.23 million to 4.26 million, number of days in working capital has been changed from 149.61 million to 104.54 million material cost composition has been changed from 40.83 million to 36.4 million, earning retention ratio has been changed from 84.59 million to 100 million, cash earnings retention ratio has been changed from 89.02 million to 100 million.

The working capital of the GlaxoSmithKline Pharmaceuticals Ltd has been increased from Rs.0 million to Rs.182060.49 million from 2015 to 2019 but in year 2017 & 2019 there was a sudden fall in the working capital that is due to fall in current assets and rise in the current liabilities. The overall working capital position of the GSK Pharm Limited was not so good till year 2019 but there was a change in the position in the year 2020 Therefore the company should require to manage in working capital properly in the future. The total current assets of GlaxoSmithKline Pharmaceuticals Ltd have been increased from Rs. 321,566.65 million to Rs. 313554.10 million whereas the total current liabilities of GlaxoSmithKline Pharmaceuticals Ltd have been increased from Rs. 321,566.65 million to Rs. 1314, 93.61 million

The inventories of **Glaxo Smith Kline Pharma limited** has been increased from Rs. 37,558.27 million to Rs. 48303.22 million, the trade receivables of the company have been increased from Rs. 10,031.79 million to Rs. 9980.12 million, the cash and cash equivalents has been increased from Rs. 191,060.64 million to Rs. 10481.15 million, the bank balances other than has been increased from Rs. 0 to Rs. 97839.18 million, the other financial assets of has been increased from Rs. 0 to Rs. 3097.64 million, the loans have been increased from Rs. 12,217.17 million to Rs. 0, the other current assets have been increased from Rs. 7,830.31 million to Rs. 7775.6 million. The change in the current liabilities is because of the trade payables has been increased from Rs. 0 to Rs. 0, the total outstanding dues of micro enterprises and small enterprises has been increased from Rs. 259.25 million to Rs. 5, 21.38 million, the total outstanding dues of creditors other than micro enterprises has been increased from Rs. 3,054,464 million to Rs. 35237.13 million, the other financial liabilities have been increased from Rs. 10,309.02 million to Rs. 65, 12.58 million, the provisions have been increased from Rs. 66,841.92 million to Rs. 276, 84.01 million, the current tax liabilities (net) has been increased from Rs. 0 to Rs. 161, 37.62 million.

Looking at the various ratios of the Glaxo Smit Kline Pharma limited such as PBIT. Interest Cover Ratio, Long Term debt equity ratio, Debt Equity ratio, earning retention ratio, cash earnings retention ratio, Inventory Turnover Ratio, Interest Cover Ratio, Net profit margin debtor's turnover ratio Cash profit margin, inventory turnover ratio, debtor's turnover ratio are increasing from year to year whereas Current Ratio, Quick Ratio has been decreased but still company is having a good current position. Remarkable decrease in the number of days in working capital, material cost composition is also decreasing. Operating profit margin has been changed from 19.15 million to 20.38 million, Profit before interest and tax margin has been changed from 17.33 million to 17.39 million, cash profit margin has been changed from 15.79 million to 15.66 million, profit margin has been changed from 14.41 million to 2.89 million, current ratio has been changed from 2.15 million to 1.72 million, quick ratio has been changed from 1.82 million to 1.27 million, interest cover has been changed from 0 to 103.16 million, inventory turnover ratio has been changed from 9.08 million to 6.68 million debtor's turnover ratio has been changed from 33.6 million to 29.27 million, number of days in working capital has been changed from 156.59 million to 40.92 million, material cost composition has been changed from 46.01 million to 41.77 million, earning retention ratio has been changed from -20.6 million to 6.04 million, cash earnings retention ratio has been changed from -15.08 million to 21.06 million.

As shown in figure 1.170 the working capital of the **Lupin Limited** has been increased from Rs. 41,031.20 million to Rs. 61,880.10 million from 2015 to 2020, though in year 2019 it was at its peak. The overall working capital position of the Lupin Limited was not so good till year 2019 but there was a change in the position in the year 2020 Therefore the company should require to manage in working capital properly in the future.

The inventories of Lupin limited has been increased from Rs. 8841.23 million to Rs. 34568.7 million, the current investments have been increased from Rs. 16.558.90 million to Rs. 23.382.5 million. the trade receivables have been increased from Rs. 26,565.70 million to Rs. 54,459.3 million, the cash and cash equivalents has been increased from Rs. 4,813.50 million to Rs. 22,148.5 million, the other bank balances have been increased from Rs. 0 to Rs. 2394.5 million, the current loans have been increased from Rs. 3,420,60 million to Rs. 370.1 million, the other current financial assets have been increased from Rs. 0 to Rs. 3,895.5 million, the current tax assets have been increased from Rs. 0 to Rs. 306.1 million, the other current assets have been increased from Rs. 1,929.20 million to Rs. 12,606.9 million, the assets classified as held for sale has been increased from Rs. 0 to Rs. 0, the total has been increased from Rs. 78323.50 million to Rs. 154,132.10 million, the current borrowings have been increased from Rs. 3,691.50 million to Rs. 24,927.5 million, the trade payables have been increased from Rs. 19,560.60 million to Rs. 0, the total outstanding dues of Micro Enterprises and Small Enterprises has been increased from Rs. 0 to Rs. 989.4 million, the total outstanding dues of other than Micro Enterprises and Small Enterprises has been increased from Rs. 0 to Rs. 23,133.6 million, the other current Financial Liabilities has been increased from Rs. 0 to Rs. 28,759.8 million, the other current Liabilities has been increased from Rs. 8,297.60 million to Rs. 2,482.5 million, the current Provisions has been increased from Rs. 5,742.60 million to Rs. 9,077.1 million, the current Tax Liabilities (Net) has been increased from Rs. 0 to Rs. 2,882.1 million, the total has been increased from Rs. 37,292.30 million to Rs. 92,252 million.

There is increase in the quick ratio, long term debt equity ratio, number of working days, material cost composition. whereas there is a slight downfall in the current ratio, inventory turnover ratio whereas there is remarkable decrease in the operating profit margin, profit before interest and tax margin, cash profit margin, debtor's turnover ratio, net profit margin, interest coverage, earning retention ratio, cash earnings retention ratio. Operating profit margin has been changed from 20.34 million to 15.31 million, profit before interest and tax margin has been changed from 24.48 million to 8.73 million cash profit margin has been changed from 18.81 million to -1.75 million, current ratio has been changed from 1.55 million to 1.05 million, quick ratio has been changed from 1.05 million to 1.24 million, debt equity ratio has been changed from 0.05 million, interest coverage has been changed from 349.1 million to 5.15 million, inventory turnover ratio has been changed from 5.14 million to 4.45 million, debtor's turnover ratio has been changed from 4.99 million to 2.9 million, number of days in working capital has been changed from 76.91 million to 83.66 million, material cost composition has been changed from 36.54 million to 38.78 million, earning retention ratio has been changed from 83.41 million to 0, cash earnings retention ratio has been changed from 85.91 million to 79.31 million.

The working capital of the **Sun Pharmaceutical Industries Limited** has been decreased from Rs. 127,689.40 million to Rs. 115,947.73 million from 2015 to 2020 though it was increased in the 2016 but thereafter it falls to 115947.73 million. The overall working capital position of the SPIL was not so good till year 2019 but there was a change in the position in the year 2020. Therefore, the company should require to manage in working capital properly in the future. The total current assets of Sun Pharmaceutical Industries Limited have been increased from Rs. 289,157.50 million to Rs. 31654.16 million whereas total current liabilities have been increased from Rs. 161,468.10 million to Rs. 15706.43 million. It has been found that there is increase in the net profit margin, quick ratio, interest cover, material cost conversion, earning retention ratio, cash earnings retention ratio. Whereas some ratio such as Current ratio, operating profit margin, Profit before interest and tax margin, Cash profit margin, debt equity ratio, long term debt equity ratio, inventory turnover ratio, debtor's turnover ratio, number of days in working capital are decreasing.

Operating profit margin has been changed from 28.67 million to 21.28 million, Profit before interest and tax margin has been changed from 23.84 million to 14.74 million, Cash profit margin has been changed from 24.73 million to 19.41 million, net profit margin has been changed from 16.54 million to 12.7 million, current ratio has been changed from 1.62 million to 1.5 million, quick ratio has been changed from 1.86 million to 1.99 million, debt equity ratio has been changed from 0.3 million to 0.17 million, long term debt equity ratio has been changed from 0.05 million to 0.04 million, interest cover has been changed from 12.47 million to 18.41 million, inventory turnover ratio has been changed from 4.89 million to 4.17 million debtor's turnover ratio has been changed from 7.3 million to 3.59 million, number of days in working capital

has been changed from 186.37 million to 138.26 million, material cost composition has been changed from 26.42 million to 27.19 million, earnings retention ratio has been changed from 84.83 million to 100 million, cash earnings retention ratio has been changed from 87.45 million to 100 million. The pharma organization have a financial department for managing the working capital management and requirement planning. Sufficient cash balance is available with the companies and the credit are happy as they are getting pain on time and companies are paying timely their bank loans and to the creditors. Budget is prepared by the organization and cash is provided for various activities as per the budget planned.

Sufficient working capital available for procuring extra raw material for increasing production as per requirement. Debtors management is done properly so that minimizes the bed debts by the Indian pharma companies. Efficient machines are employed for minimum raw material wastage. Maintenance shutdown is done to prevent long breakdowns. Sufficient cash is provided to buy the safety equipment. Production department gets money for any contingency requirement. Organization is having good past records and having a good market reputation which could help it in procuring short term bank loans easily for the business activities, Market demand is high so company needs more working capital to increase its capacity of production, , New technology should be employed to improve production and reduce working capital requirement, Bulk purchase of raw material will be cheaper, Organization can get short term loans under various schemes launched by our government to promote its working capital requirement, , Company need more working capital for the purchase of more raw material, , Various Problems faced in Working Capital Management are We highly depends on the import of API as raw material is not provided in our own country Raw material purchases is costlier, Fluctuating demand, Fluctuating raw material prices ,High marketing cost, Delay in Working capital loan procedures.

Some of the companies like Sun Pharmaceutical Industries Limited & Cipla Limited has reduced there working capital in the past 6 years whereas for the companies like GSK Limited there was a drop and then again an increase has been seen and Lupin Limited & Aurobindo it has been increased. Therefore, it is hereby concluded that pharmaceutical companies are facing many challenges such as market competition, dependency on import of API the companies instead of it they are managing their overall working capital position very efficiently. They are carrying with the production activities without any breaks. Employees are positive and appreciate the management capabilities in managing the working capital requirement for their company's. The pharmaceutical companies are running in profits and efficiently managing their working capital requirements but looking at the rising competition they need to make drugs at lower cost and should reduce their working capital requirement by shortening their operating cycle. The working capital cycle and the number of working capital show that in some companies the reduction is their but in some companies it is still high. The working capital management is a focus area of the management and all the pharma are trying to reduce the working capital requirement through proper material management, reducing the gap between demand and production & managing their efficient creditor & debtor's cycles.

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