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A STUDY ON FINANCIAL PERFORMANCE OF PHARMACEUTICAL COMPANY IN INDIA

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ABSTRACT

A financial performance is main objective being or has been accomplished and is an important for risk management. It is the process of measuring the results of a firm policies and operation in monetary term. The financial performance analysis identifies the financial strength and weaknesses of the firm by properly establishing relationship between the item of the balance sheet and profit and loss account. The business organization matter a lot for all its stakeholder. It is used to measure firm overall financial health over a given period of time. In this research have attempted to a financial performance of pharmaceutical company in India is using by Z-score model. The study concludes that the overall financial health of pharmaceutical Industry is in the healthy zone we selected five pharmaceutical companies in this report Cipla Ltd, Sun pharmaceutical ltd, Dr Reddy laboratories Ltd, IPCA laboratories, Ajanta pharmaceutical. Two company are Healthy zone IPCA laboratories and Ajanta pharmaceutical and Three companies are bankruptcy Zone Cipla Ltd, Sun pharmaceutical ltd, Dr Reddy laboratories.

KEYWORDS

Ratio, Pharmaceutical Companies, Capital Structure, Business Risk, Bankruptcy, Financial Health

INTRODUCTION

Indian pharmaceutical industry is known for its generic medicines and low-cost vaccine in the world. The use of fund, as a vibrant sector, presently India pharmaceutical production volume financial performance is very important for finance risk management. It is the process of measuring the result of a firm policies and operation in monetary term and also measures firm overall financial health over a given period of time and it also use to compares similar industry. Areas of financial performance analysis the firm's production and productivity (total business performances) working capital performances, fund flow, social perform, liquidity, profitability varies financial ratios analysis includes.

- Financial structure analysis
- Working capital analysis
- Activity analysis
- Probability analysis

LITERATURE REVIEW

1. **M.Y. Khan & P.K. Jain (2007)** "Financial performance is the process of selection, relation and evaluation the focus of financial position. The financial statement is significant relationship that exists between them. The analysis of financial statement is a process of evaluating the relationship between component parts of financial statement to obtain a better understanding of the firm's position and performance".
2. **James Hutchinson (2010)** He realizes that about the long term debt to equity ratio of a Business. The ratio of these numbers tells a lot about the business. It is calculated by taking the debt owed by the company and divided by the owner's equity, also known as capital. The debt number may include all liabilities, or just long term debt.

3. **Andrew B. Jackson (2021)** The literature on financial statement analysis attempts to improve fundamental analysis and to identify market inefficiencies with respect to financial statement information. In this paper, the author reviews the Extant research on financial statement analysis. The author provides some preliminary evidence using Chinese data and offer suggestions for future research, with a focus on utilizing unique features of the Chinese business environment as motivation.
4. **Laitinen (2006)** He presents a framework for the public financial statements of the partner firm's financial statement analysis, a network of small and medium sized enterprises. The proportion of income and balance sheet statement items is traced by a simple estimation to there sources used by the network and identified by each firm. The virtual network income and balance sheet statements are made up of the allocated size.
5. **Vera Palea (2014)** The paper aims to discuss fair value accounting and its usefulness to financial statement users. The European Commission has endorsed IFRS 13 on fair value measurement and IFRS 9, which extends the use of fair value for financial instruments. Further more, fair value accounting has been under deep scrutiny because of its alleged role in the financial crisis. Therefore, the usefulness of fair value accounting is a key issue for standard setting purposes.

STATEMENT OF PROBLEM

When a company faces problems stuck not experiences the growth. Liquidity position, solvency position become very poor distress for long period and go down revenue collection, reduction of sales, as a result, company cannot pay its due and cannot earn profit. The reduces net worth amount their effect on company shares price and goodwill. There is different reason for the distress of a business entity. If their problems persist for long period of time in a company, then it can be declared as bankrupt and goes into liquidation. Finance will be the back bone for all their activities. A firm should be financially surviving and competition. The present study aims to analyze financial performance of pharmaceutical company in India by applying Z-score model.

Objectives of the study:

- To study the evaluate the financial health of the companies by using Z score model.
- To offer valid suggestion recommendations for future growth and development of the select pharmaceutical companies in India.

RESEARCH METHODOLOGY

This study has been done by using secondary data and it has collected from published financial report of selected pharmaceutical companies by undertaken for the period of five year from 2108-2022. To study has been undertaken five selected pharmaceutical companies are Sun Pharmaceutical Ltd, Cipla Ltd, Reddy Laboratories, Ajanta Pharma Limited, IPCA Laboratories Limited.

Tools Applied:

In this study Edward I Altman Z-score model is applied to analyze the data by considering liquidity, profitability, solvency and financial efficiency, various accounting ratio like ratio of working capital to assets, ratio of earnings before interest and ratio of making value of equity to book value debt and ratio of sales to total assets have been used in this study.

Altman Z-score:

In 1968 Z-score formula establish by Edward Altman for predicting bankruptcy or financial health condition of firm an enterprise over a period. He was assistant professor of finance at New York university. Altman z-score model combines five financial ratios to predict the probability company would collapse in the next two months. This formula give idea for predicting bankruptcy started at the time of Great Depression, when companies experienced a sharp rise in incidence of default. Edward Altman in combined a number of accounting ratios (leverage, liquidity, activity and profitability) to from an index of the profitability's. Investors use Altman Z-score to Page 4 make a decision to buy or sell a company's stock. Investors may consider purchasing the stock minimal risk of the business and depending of company financial strength.

The data collected for the study Z-score model on the based five key financial ratio. The different ratios are combined into a single measure called z-score variable 'A' to 'D' are computed percentage value while 'E' is computed number of times. The formula for "Z" Score Analysis is as follows:

$$Z = 0.012A + 0.014B + 0.033C + 0.006D + 0.999E$$

Zeta (ζ) is the Altman's Z-score A= Ratio of working capital to total assets = Working capital / Total assets * 100 B = Ratio of Net operating profit to Net sales = Net operating profit / Net sales * 100 C = Ratio of Earnings before interest and taxes to total assets = Earnings before interest and taxes / total assets * 100 D = Ratio of Market value of equity to Book value of debt = Market value of equity / Book value of debt * 100 E = Ratio of Sales to total assets = Sales / total assets * 100

Altman Guidelines:

- If a company show a Z-score closes to 1.8 it is considered to be in bankruptcy zone.
- If a "Z" score between 1.8 and 3 that the company is in a gray area and with a moderate chance of filing for bankruptcy. If a score of 3 and above means that the company is in safe zone and is unlikely to file for bankruptcy.

DATA ANALYSIS AND INTERPRETATION**Ratio of Working Capital to Total Assets:**

Table 1 reveals that the average ratio of working capital to total assets of the sample pharmaceutical units from 2018-2022

Ratio of Working Capital to Total Assets (A) (in Percentage)

company	2018	2019	2020	2021	2022	Average
CIPLA LTD	27.07	27.31	28.18	28.75	33.13	28.89
SUN PHARMACEUTICALS INDUSTRIES LTD	31.48	32.16	28.40	26.03	18.21	27.26
DR REDDYS LABORATORIES LTD	21.95	23.21	29.48	33.42	36.06	28.83
IPCA LABORATORIES LTD	29.24	32.10	30.71	35.52	33.86	32.29
AJANTA PHARMA LTD	30.47	28.66	30.07	32.24	36.94	31.68

Table 1 reveals that the average ratio of working capital to total assets of the sample pharmaceutical units from 2018-2022. The average net liquid assets to total capitalization is recorded highest in Divis IPCA pharmaceutical (32.29%) followed by Ajanta Pharmaceutical Ltd. (31.68%), CIPLA Ltd. (28.89%) which indicates adequate liquid assets to meet short term obligations. The Sun pharmaceutical recorded negative net liquid assets ratio of 27.26% indicating inadequate liquid assets.

RATIO OF NET OPERATING PROFIT TO NET SALES:

Table 2 reveals that the average ratio of net operating profit to net sales of the sample pharmaceutical units from 2018-2022

Ratio of Net Operating Profit to Net Sales (B) (in Percentage)

company	2018	2019	2020	2021	2022	Average
CIPLA LTD	9.31	9.34	9.03	12.55	11.56	10.36
SUN PHARMACEUTICALS INDUSTRIES LTD	7.91	9.17	11.47	8.67	8.47	9.14
DR REDDYS LABORATORIES LTD	6.63	12.62	11.57	10.25	10.13	10.24
IPCA LABORATORIES LTD	7.35	11.88	13.13	21.13	15.25	13.75
AJANTA PHARMA LTD	30.47	28.66	30.07	32.24	36.94	31.68

Table 2 reveals that the average ratio of net operating profit to net sales of the sample pharmaceutical units from 2018-2022. The average net operating to net sales is recorded highest in Divis Ajanta pharmaceutical. (31.68%), when compared to other sample units like IPCA Laboratories Ltd (13.75%), Cipla Ltd. (10.36%) etc. indicating efficiency of the management in controlling expenses. The average net operating profit to net sales recorded lowest in Sun pharmaceutical (9.14%) when compared to all other sample units indicating less efficiency of the management in controlling expenses.

RATIO OF EARNINGS BEFORE INTEREST AND TAXES TO TOTAL ASSETS:

Table 3 reveals that the average ratio of earnings before interest and taxes to total assets of the sample pharmaceutical units from 2018-2022

Ratio of Earnings before Interest and Taxes to Total Assets (C) (in Percentage)

company	2018	2019	2020	2021	2022	Average
CIPLA LTD	7.36	8.75	9.30	13.24	13.01	10.33
SUN PHARMACEUTICALS INDUSTRIES LTD	5.41	5.90	7.35	4.14	6.42	5.84
DR REDDYS LABORATORIES LTD	6.40	10.42	8.12	10.85	10.29	9.14
IPCA LABORATORIES LTD	7.06	12.01	14.05	22.90	14.87	14.18
AJANTA PHARMA LTD	25.66	19.30	20.16	24.14	22.74	22.40

Table 3 reveals that the average ratio of earnings before interest and taxes to total assets of the sample pharmaceutical units from 2018-2022. This ratio is recorded highest in Divis Ajanta pharmaceutical (22.40%), when compared to all other sample units which indicates the efficiency of productivity of assets employed. The ratio is recorded least in sun pharmaceutical (5.84) which indicates inefficiency of productivity of assets employed.

RATIO OF MARKET VALUE TO BOOK VALUE OF DEBT:

Table 4 reveals that the average ratio of market value of equity to book value of debt of the sample pharmaceutical units from 2018-2022

Ratio of Market Value of Equity to Book Value of Debt(D) (in Percentage)

company	2018	2019	2020	2021	2022	Average
CIPLA LTD	10.72	9.87	12.10	32.63	77.80	28.62
SUN PHARMACEUTICALS INDUSTRIES LTD	11.44	10.93	10.17	37.08	170.10	47.94
DR REDDYS LABORATORIES LTD	6.81	12.03	23.46	24.78	21.12	17.64
IPCA LABORATORIES LTD	6.59	13.34	17.57	45.50	33.50	23.30
AJANTA PHARMA LTD	4571.24	168.92	106.97	332.55	415.65	1119.06

Table 4 reveals that the average ratio of market value of equity to book value of debt of the sample pharmaceutical units from 2018-2022. This ratio is recorded highest in Ajanta Pharmaceutical Ltd. (1119.06%), when compared all other sample units which indicates market value of equity is more than that of the debt capital. This ratio is recorded least in Dr. Reddy Laboratories Ltd (1.942%), when compared to all other sample units which indicates the company uses less debt capital.

RATIO OF SALES TO TOTAL ASSETS:

Table 5 reveals that the average ratio of sales to total assets of the sample pharmaceutical units from 2018-2022 (In Time)

company	2018	2019	2020	2021	2022	Average
CIPLA LTD	0.67	0.69	0.73	0.77	0.81	0.73
SUN PHARMACEUTICALS INDUSTRIES LTD	0.41	0.45	0.48	0.50	0.55	0.48
DR REDDYS LABORATORIES LTD	0.64	0.69	0.75	0.72	0.72	0.70
IPCA LABORATORIES LTD	0.79	0.82	0.88	0.89	0.76	0.83
AJANTA PHARMA LTD	0.88	0.77	0.79	0.78	0.84	0.81

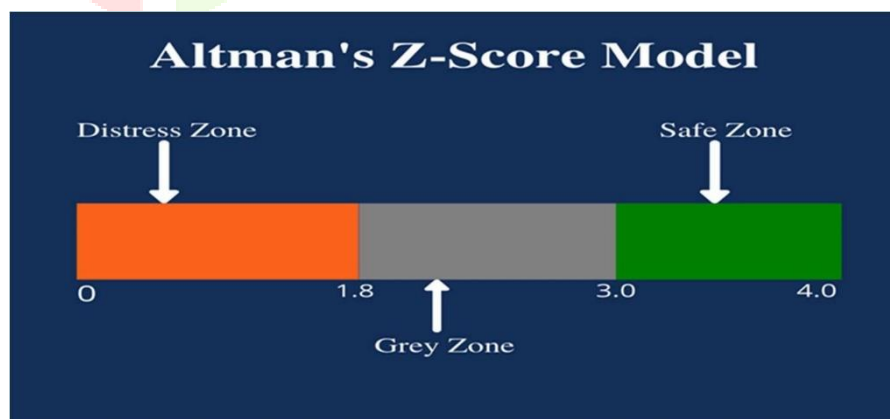
Table 5 reveals that the average ratio of sales to total assets of the sample pharmaceutical units from 2018-2022. This ratio is recorded highest in IPCA Laboratories Ltd. (0.83times), when compared to all other sample units which indicates efficiency of management in converting assets to sales. The ratio is recorded lowest in Sun pharmaceutical (0.48 times), when compared to all other sample units which indicates less efficiency of management in converting assets to sales.

ALTMAN Z – SCORE FOR THE SAMPLED COMPANIES:

Table 6 reveals the the financial health of sample pharmaceutical companies in Indiaby way of Z score calculated by considering the data for the year 2018-2022

Name of the Companies	A	B	C	D	E	Z-Score
CIPLA LTD	28.89	10.36	10.33	28.62	0.73	1.74
SUN PHARMACEUTICALS INDUSTRIES LTD	27.26	9.14	5.84	47.94	0.48	1.41
DR REDDYS LABORATORIES LTD	28.83	10.24	9.14	17.64	0.70	1.60
IPCA LABORATORIES LTD	32.29	13.75	14.18	23.30	0.83	2.02
AJANTA PHARMA LTD	31.68	20.58	22.40	1119.06	0.81	8.93

Table 6 reveals that the financial health of sample pharmaceutical companies in India. From the selected companies, no companies Z score is greater than 3. Therefore, no company is in “too healthy zone”. Z score value of Ajanta pharmaceutical, IPCA Laboratories are between 1.80 and 3. Therefore, they are in healthy zone. The Z score value of CIPAL Ltd, Sun Pharma Industries Ltd. and Dr. Reddy Laboratories Ltd. are found below 1.80, which indicating bankruptcy zone.



FINANCIAL HEALTH OF THE SAMPLED COMPANIES:

Table 7 brings the financial health of the sampled companies considered for this present study of the light.

Variables	Z-Score	Financial Health
AJANTA PHARMA LTD	8.90	HEALTHY ZONE
IPCA LABORATORIES LTD	2.02	HEALTHY ZONE
Cipla Ltd	1.74	BANKRUPTCYZONE
DR REDDYS LABORATORIES LTD	1.60	BANKRUPTCYZONE
SUN PHARMACEUTICALS INDUSTRIES LTD	1.41	BANKRUPTCYZONE

CONCLUSION:

It can be concluded that the overall financial health of pharmaceutical industry is in healthy zone. Because from the five selected companies, two companies (IPCA Laboratories Ltd., Ajanta pharmaceuticals.) are in healthy zone. Only three companies (CIPAL Ltd., Sun Pharma Industries Ltd. and Dr. Reddy Pharmaceuticals Ltd.) are in bankruptcy zone.

REFERENCES:

<https://www.simplilearn.com/financial-performance-rar21-article>

<https://www.acadpubl.eu/JSI/2017-117-15/ARTICLES/15/6.PDF>

Selvam, M., Vanitha, S., & Babu, 2004; "A Study on Financial health of cement industry-"Zscore Analysis", the management Accountant, july, vol.39, No.7, pp. 591-593.

https://www.shanlaxjournals.in/pdf/MGT/V4N2/MGT_V4_N2_010.pdf

<https://www.screener.in/company/CIPLA/consolidated/>

<https://www.screener.in/company/SUNPHARMA/consolidated/>

<https://www.screener.in/company/AJANTPHARM/consolidated/>

<https://www.screener.in/company/DRREDDY/consolidated/>

<https://www.screener.in/company/IPCALAB/consolidated/>

**Annual Report 2022 Sun pharmaceutical, Cipla Ltd., Dr. Reddy's Laboratories Ltd,
Ajanta pharma ltd, IPCA Laboratories**