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An empirical study on financial performance of indian pharmaceutical industry

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Abstract

Financial performance analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. It also helps in short-term and long term forecasting and growth can be identified with the help of financial performance analysis. The dictionary meaning of 'analysis' is to resolve or separate a thing into its element or components parts for tracing there relation to things as whole and to each other. The analysis of financial statement is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the firm's position and performance. This analysis can be undertaken by management of the firm or by parties outside namely, Owners, Creditors and Investors; financial analysis determines a company's health and stability.

The data gives you an intuitive understanding of how the company conducts business. Stockholders can find out how management employs resources and whether they use them properly. Governments and regulatory authorities use financial statements to determine the legality of a company's fiscal decisions and whether the firm is following correct accounting procedures. Finally, government agencies, such as the Internal Revenue Service, use financial statement analysis to decide the correct taxation for the company.

It included statistical analysis such as Ratio Analysis, Mean, Standard Deviation, Co-Efficient of Variance. It

1. INTRODUCTION

Financial performance analysis is an important tool for measuring the financial performance of any company. The main aspect of financial management is working capital and it should be done on day to day basis. Hence the company permits the researcher to do in the area of finance. This study helps review the financial performance of the company.

With this background in view, the present study was undertaking for a proper insight in the financial analysis. This is very much important due to the price of company product which play significant factor in deciding inflation rate. Any changes in pharmaceutical prices will reflect in all drugs. Any financial performance analysis in industry will affect the growth of the economy in the country.

2. SCOPE OF THE STUDY

The study almost cover the entire area of financial operations covered by selected companies in "Indian Pharmaceutical Industry" the study has been converted with the help of data obtain from audited financial record. The audited records are the company's annual reports pertaining to the past five (5) years from 2011-2012 to 2015-2016 and the audited financial records are obtained from the company's annual report. The researcher tries to measure the performance of the industry and its working capital management in terms of financial wealth.

covers the major strengths and weakness of the company at micro level. So this study has wider scope to future with proper evolution of each and every movement during the study period.

3. OBJECTIVES OF THE STUDY

- To analyze the profitability position of the selected companies in Indian Pharmaceutical Industry.
- To analyze the liquidity position of the selected companies in Indian Pharmaceutical Industry.
- To offer suggestions for further improvement.

4 .RESEARCH METHODOLOGY RESEARCH DESIGN

A research design is the arrangement of conditions for collection and analyzing of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is a conceptual structure within which research is conducted, constitute the blue print for the collection, measurement and analysis of data. After formulating the research problem the researcher will be required to prepare a research design.

SAMPLE DESIGN

Keeping in view of the scope of the study, the Indian Pharmaceutical Industry (CADILA, IPCA, GLENMARK

and CIPLA) were considered for the study. The selected Pharmaceutical Industries were selected because of the availability of information which is needed to accomplish this task. Due to this, the Industry was restricted to five. Therefore, this study is exposed facto-based on survey method making a survey on 5 Pharmaceutical Industries in Indian.

Period of study

The study period has been confined to for 5 years from 2011-2012 to 2015-2016. The accounting year of the selected companies is from 1st April to 31st March.

Analysis

In order to analyze the collected data some of the financial tools are used to analysis the financial statement such as ratios, trend analysis and arithmetic year.

TOOLS USED FOR THE ANALYSIS

Ratio analysis

Mean

Standard Deviation

Co-efficient Variance

5. ANALYSIS

OPERATING PROFIT RATIO

This ratio helps in determining the ability of the management in running the business and the efficiency with which the management produces each unit of product. It also shows the average spread of cost of goods sold and sales.

TABLE NO. 1

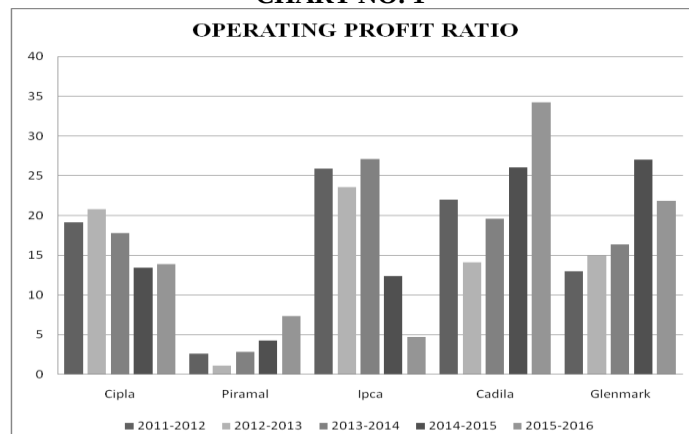
OPERATING PROFIT RATIO					
year	Cipla	Piramal	Ipca	Cadila	Glenmark
2011-12	22.67	-11.87	22.05	21.52	19.87
2012-13	25.83	-8.98	20.08	19.21	17.05
2013-14	21.2	3.47	22.66	19.96	21.55
2014-15	19.35	18.51	16.87	29.03	28.8
2015-16	17.06	41.73	10.11	36.14	28.71
MEAN	21.22	8.57	18.35	25.17	23.19
SD	2.97	19.7	4.59	6.49	4.76
CV	0.14	2.30	0.25	0.25	0.20
RANGE	8.77	53.6	12.55	16.93	1.66
CAGR	-5.53%	28.61%	-14.44%	10.92%	7.64%

Sources : Annual financial statements of selected companies

Table No. - 1 reveals that the mean value of operating profit ratio of Cadila was 25.17% which is high compared to the selected companies during the study period. This indicates that Cadila have better performance when compared with other companies. On the other hand, the mean value of Piramal shows worst performance with 8.57% in operating profit ratio during the study period. CV analysis shows that Piramal have erratic fluctuation of 2.3% during the study period. CAGR of selected companies, Piramal shows a better performance of 28.61% while IPCA shows a very poor CAGR of -14.44% during the study period.

CHART NO. 1

OPERATING PROFIT RATIO



GROSS PROFIT RATIO

TABLE NO. 2

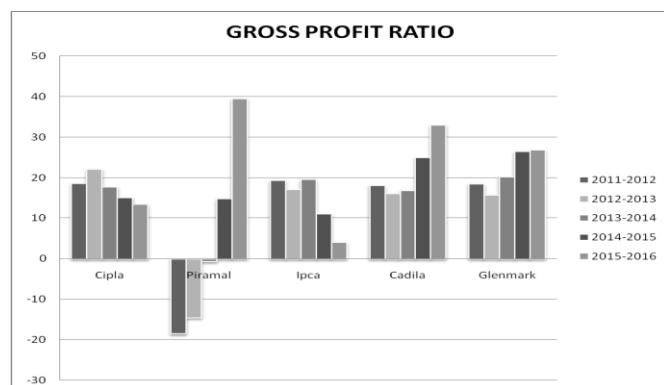
Sources : Annual financial statements of selected companies

Table No. 2 Shows that the mean value of gross profit ratio of Cadila was 21.79% which is high when compared with the selected companies, it shows that Cadila did better during the study period. On the other hand, Piramal shows worst performance with 4.12% in gross profit ratio during the study period. Analysis of CV reveals that Piramal shows erratic fluctuation of 5.14% during the study period. While the CAGR of Piramal shows a better performance of 16.38% and IPCA shows very poor performance of -26.70% during the study period.

CHART NO.2

GROSS PROFIT RATIO

year	Cipla	Piramal	Ipca	Cadila	Glenmark
2011-12	18.62	-18.49	19.28	18.09	18.52
2012-13	22.14	-14.53	17.06	16.03	15.76
2013-14	17.75	-0.66	19.54	16.81	20.24
2014-15	15.08	14.81	11.12	25.02	26.45
2015-16	13.4	39.47	4.08	33	26.88
MEAN	17.39	4.12	14.21	21.79	21.57
SD	3.01	21.19	5.90	6.44	4.40
CV	0.17	0.53	0.41	0.29	0.20
RANGE	8.72	57.96	15.46	16.97	11.02
CAGR	-6.37%	16.38%	-26.70%	12.78%	8.35%

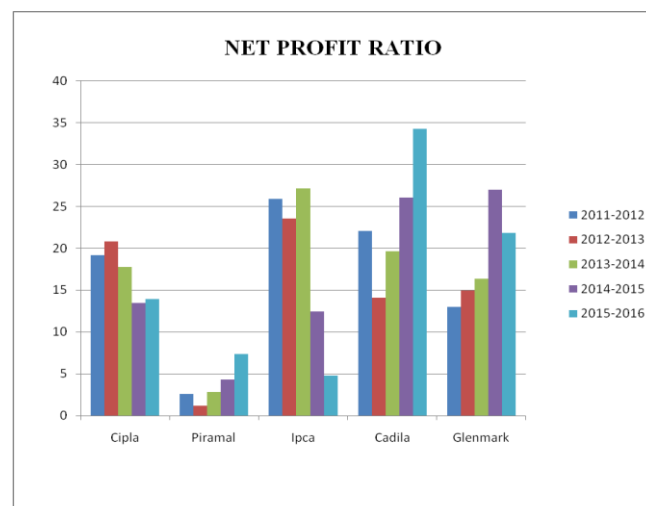


**NET PROFIT RATIO
TABLE NO.3**

NET PROFIT RATIO					
year	Cipla	Piramal	Ipca	Cadila	Glenmark
2011-12	16.1	11.33	11.9	20.85	16.95
2012-13	18.37	-16.5	11.92	13.56	19.8
2013-14	14.8	-20.07	14.75	22.35	18.85
2014-15	11.65	15.52	8.3	24.05	19.81
2015-16	11.61	30.17	3.24	28.1	24.01
MEAN	14.50	4.09	10.02	21.78	19.84
SD	2.61	19.34	3.96	4.77	2.31
CV	0.18	4.72	0.39	0.21	0.11
RANGE	6.76	50.24	11.51	14.54	7.06
CAGR	-6.33%	21.64%	-22.91%	6.15%	7.21%

Sources : Annual financial statements of selected companies

Table-3 indicates that the mean value of net profit ratio of Cadila shows better performance with 21.78% high when compared with other selected companies, it shows that Cadila is doing better during the study period. On the other hand, Piramal shows worst performance with 4.09% in net profit ratio during the study period. Analysis of CV shows that Piramal have erratic fluctuation of 4.72% during the period of study. CAGR of Piramal shows a better performance with 21.64% while Ipca showed a very poor performance with -22.91% during the study period.



**RETURN ON CAPITAL EMPLOYED RATIO
TABLE NO. 4**

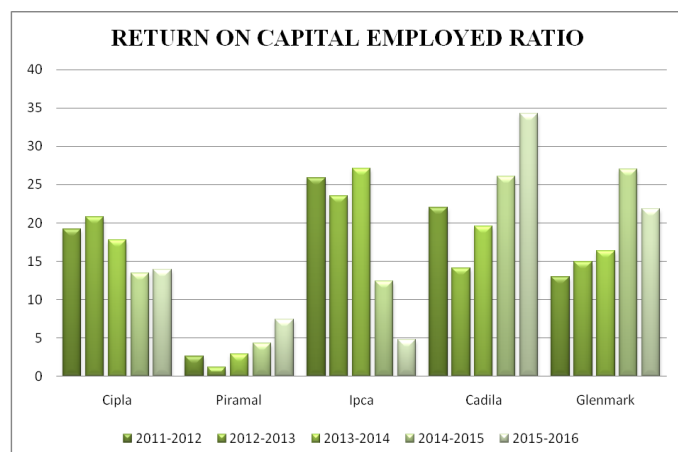
RETURN ON CAPITAL EMPLOYED RATIO					
year	Cipla	Piramal	Ipca	Cadila	Glenmark
2011-12	19.17	2.6	25.88	22.02	12.95
2012-13	20.81	1.14	23.53	14.09	14.95
2013-14	17.75	2.84	27.1	19.6	16.35
2014-15	13.44	4.29	12.4	26.04	26.99
2015-16	13.9	7.37	4.76	34.24	21.81
MEAN	17.01	3.64	18.73	23.19	18.61
SD	2.90	2.11	8.71	6.74	5.11
CV	0.17	0.57	0.46	0.29	0.27
RANGE	6.91	6.23	22.34	20.22	14.04
CAGR	-6.23%	23.17%	-28.73%	9.23%	10.99%

Sources : Annual financial statements of selected companies

Table No.4 reveals that the mean value of return on capital employed ratio of Cadila was 23.19% which shows better performance compared to other selected companies, this indicates that Cadila is doing well during the study period. On the other hand, Piramal shows mean value of return on capital employed ratio was 3.64% indicating worst performance during the study period. Analysis of CV shows that Piramal have erratic fluctuation of 0.57% during the study period. CAGR shows that Piramal indicates a better performance of 23.17% while Ipca shows very poor performance of -28.73% during the period of study.

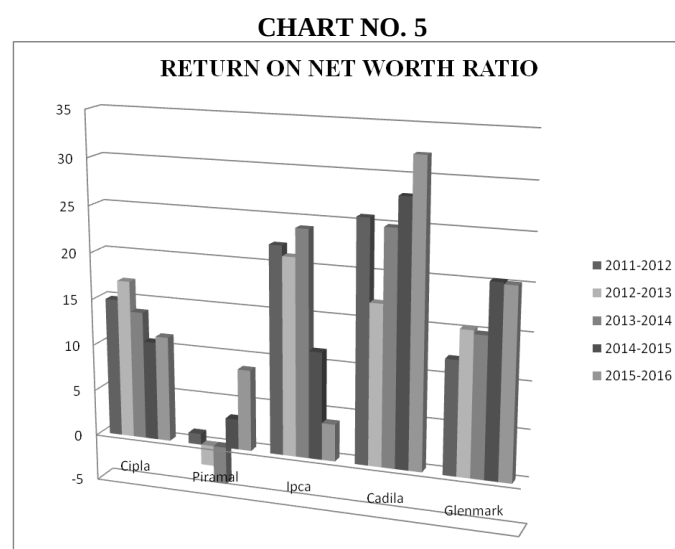
CHART NO. 4

CHART NO.3



RETURN ON NET WORTH RATIO

Return on net worth ratio, measures the profitability and calculate how many dollars of profit a company generates with each dollar of shareholders equity.



RETURN ON LONGTERM FUND RATIO

This reflects the earning power of funds belonging the firm after all debts are paid. It also measures the ability of the management to generate adequate returns for the capital invested.

TABLE NO. 5

RETURN ON NET WORTH RATIO					
Year	Cipla	Pirama l	IPCA	Cadil a	Glenmar k
2011-2012	14.9	1.17	22.19	25.71	12.13
2012-2013	17	-2.19	21.1	17.12	15.3
2013-2014	13.76	-4.05	24.09	24.89	14.92
2014-2015	10.65	3.25	11.46	28.08	20.34
2015-2016	11.33	8.71	3.96	32.21	20.15
MEAN	13.52	1.37	16.56	25.60	16.56
SD	2.32	4.46	7.66	4.94	3.19
CV	0.16	3.25	0.46	0.19	0.19
RANGE	4.25	12.76	20.13	15.09	8.21
CAGR	-5.33%	49.41%	-29.16%	4.61%	10.68%

Sources : Annual financial statements of selected companies

This, table No. indicates that the mean value of return on net worth ratio of Cadila is 25.60% which is better when compared with other selected companies; it shows that Cadila is doing better during the study period. On the other hand Piramal shows a worst performance of mean value of return on net worth ratio with 1.37% during the study period. CV analysis shows erratic fluctuation of Piramal with 3.23% during the study period. The CAGR analysis shows that Piramal have a better performance with 49.41% while Ipca shows a very poor performance of -29.16% during the period of study.

TABLE NO. 6

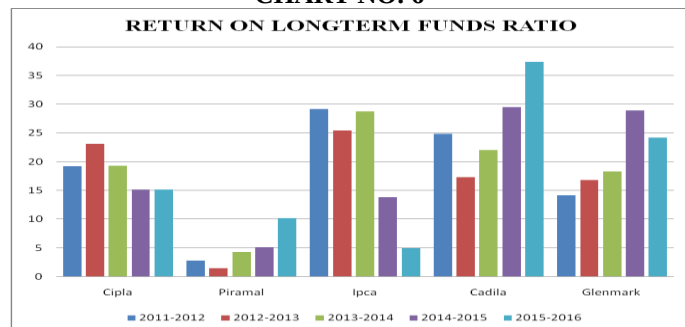
RETURN ON LONG TERM FUNDS RATIO					
Year	Cipla	Pirama l	Ipca	Cadil a	Glenmar k
2011-12	19.19	2.82	29.15	24.82	14.13
2012-13	23.08	1.52	25.44	17.33	16.79
2013-14	19.3	4.34	28.74	22.04	18.33
2014-15	15.12	5.17	13.86	29.5	28.88
2015-16	15.18	10.17	4.94	37.39	24.16
MEAN	18.37	4.804	20.42	26.21	20.45
SD	2.98	2.96	9.52	6.84	5.34
CV	0.15	0.61	0.46	0.26	0.26
RANG E	7.96	8.65	24.21	20.06	14.75
CAGR	-4.58%	29.25%	-29.88%	8.54%	11.32%

Sources : Annual financial statements of selected companies

Table No. 6 displays that the mean value of return on long term fund ratio of Cadila was 26.21% which is better compared to other selected companies, this shows that Cadila is doing better during the period of study. On the other hand Piramal shows mean value of return on long term fund ratio with 4.80% which indicates worst performance during the study period. The CV analysis shows that Piramal have erratic fluctuation of 0.61% during the study period. The CAGR of Piramal shows better performance of 29.25%

while Ipca shows very poor performance of -29.88% during the study period.

CHART NO. 6



CURRENT RATIO

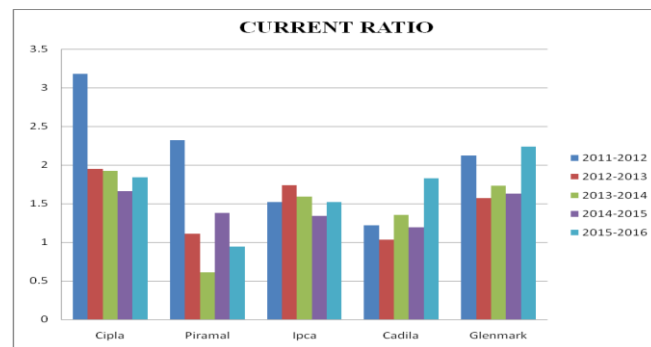
TABLE NO. 7

CURRENT RATIO					
Year	Cipla	Pirama l	Ipc a	Cadil a	Glenmar k
2011-12	3.18	2.32	1.52	1.22	2.12
2012-13	1.95	1.11	1.74	1.03	1.57
2013-14	1.92	0.61	1.59	1.35	1.73
2014-15	1.66	1.38	1.34	1.19	1.63
2015-16	1.84	0.94	1.52	1.83	2.24
MEAN	2.11	1.27	1.54	1.32	1.85
SD	0.60	0.64	0.14	0.30	0.30
CV	0.28	0.51	0.09	0.23	0.16
RANG E	1.52	1.71	0.4	0.8	0.67
CAGR	10.36 %	- 16.53%	0%	8.45%	1.11%

Sources : Annual financial statements of selected companies

The table No. 7 points out that the mean value of current ratio of Cipla indicates 2.11% which is high compared to other selected companies during the study period. On the other hand, Piramal shows a mean value of current ratio of 1.27% which shows worst performance during the study period. Analysis of the CV shows that Piramal have erratic fluctuation of 0.51% during the study period. The CAGR analysis of Cadila shows better performance of 8.45% and Ipca 0% which shows very poor performance during the study period.

CHART NO. 7



QUICK RATIO

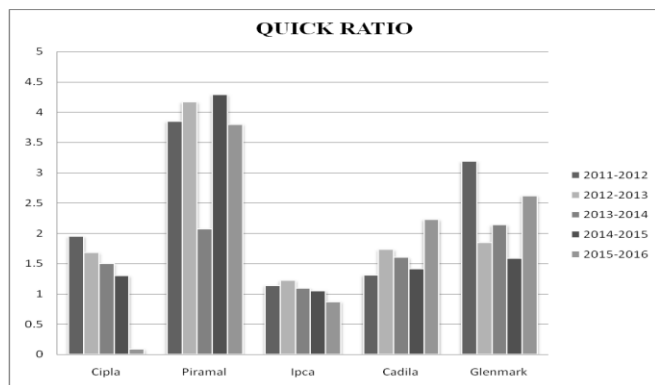
TABLE NO. 8

QUICK RATIO					
year	Cipla	Pirama l	IPCA	Cadila	Glenmar k
2011-12	1.95	3.85	1.14	1.31	3.19
2012-13	1.68	4.17	1.22	1.73	1.85
2013-14	1.5	2.07	1.09	1.6	2.14
2014-15	1.3	4.29	1.05	1.41	1.59
2015-16	0.09	3.8	0.87	2.23	2.62
MEAN	1.30	3.63	1.07	1.65	2.27
SD	0.64	0.80	0.11	0.32	0.56
CV	0.49	0.22	0.10	0.19	0.25
RANG E	1.86	2.22	0.53	0.63	1.6
CAGR	- 45.9 %	-0.26%	- 5.26%	11.23 %	-3.86%

Sources : Annual financial statements of selected companies

Table NO. 8 reveals that the mean value of quick ratio of Piramal was 3.63% which is high compared to other selected companies, this indicates that Piramal did better during the study period. On the other hand, Ipca shows worst performance of mean value of quick ratio with 1.07% during the study period. The CV analysis shows that Cipla have high fluctuation of 0.49% during the study period. The analysis of CAGR proves that Cadila have better performance of 11.23% while Piramal shows -0.26% which indicate very poor performance during the study period.

CHART NO. 8



6. FINDINGS

The operating profit ratio of Cadila has better performance (25.17%), while compared with all other selected companies.

The CAGR of piramal points out that it has the best gross profit ratio of (16.38%), while IPCA indicate poor CAGR of (-26.70%) compared with selected companies.

Piramal CV net profit ratio demonstrate a high fluctuation (4.72%), while IPCA CAGR indicate poor performance of (-22.91%) compared to selected companies.

Return on capital employed ratio shows that Cadila has better performance with 23.19%, while the CAGR of IPCA point out as -28.73%, when compared to all other selected companies.

Cadila return on net worth ratio reveals that have better performance with 25.60%, while IPCA indicate poor CAGR with -29.16% compared to selected companies.

Analysis on return on long term fund demonstrate that Cadila have better performance (26.21%), while Piramal point out erratic fluctuation of (0.61%).

The current ratio of Cipla indicates (2.11%), which is better compared to selected companies. The CAGR of Piramal reveals that with decreasing trend (-16.53).

Piramal shows (3.63%), high quick ratio which is compared to selected companies. Cipla indicate poor CAGR of (-45.94%) from the selected companies.

7. SUGGESTIONS

Based on the above findings of the study on the selected companies, The following suggestions offered to better improve the financial performance of the Indian Pharmaceutical Industry.

The selected companies are known to be manufacturing sector of Indian Pharmaceutical Industry, for this reason current ratio is of great significant. From the study it reveals that under current ratio of all the selected companies need to maintain their current asset rule of 2:1 except CIPLA.

The overall analysis shows how the selected companies are maintaining their quick asset properly.

Under Profitability Ratio, It is suggested that all the companies except Piramal are maintaining proper profitability. From all indications Piramal Company need to maintain better profitability otherwise the company will lack goodwill.

The Management of Indian Pharmaceutical Industry should adopt the practice of periodic intercompany comparison. This will help to tackle the areas of weakness and

strength that will help the company's management to take corrective measures.

The management of different department should set-up a separate body to monitor the fund which are borrowed and the means by which it is utilized.

8. Conclusion

The Indian pharmaceuticals market increased at a CAGR of 17.46 per cent during 2005-16 with the market increasing from US\$ 6 billion in 2005 to US\$ 36.7 billion in 2016 and is expected to expand at a CAGR of 15.92 per cent to US\$ 55 billion by 2020. By 2020, India is likely to be among the top three pharmaceutical markets by incremental growth and sixth largest market globally in absolute size. 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. So the companies on this sector has to concentrate much more on liquidity and profitability by adopting the said suggestions to act as a super power in the world pharmaceutical industry.

REFERENCE

1. Mohan Reddy .p, "Management of working capital", Jaipur, 1991.
2. Sharma R.K. and gupta S.K, *Management Accounting*". First edition, 1991.
3. Dr.P. Ayyappan, and Dr.A. Vijayakumar, "profitability and productivity Analysis Indian Public Sector Oil Refining Industry" 2013.
4. Kulkarmi.P.V, Satyaprasad. B.G, "Financial Management", 2001.
5. Kothari.R.K. "Research Methodology".

WEB - SITES

www.cipla.com
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