

A COMPARATIVE STUDY OF FINANCIAL STATEMENTS OF RELIANCE INDUSTRIES LTD., SAHARA PETROCHEMICALS LTD. AND CHINA PETROLEUM AND CHEMICAL CORPORATION (SINOPEC CORP.)

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ABSTRACT: This study is conducted purely based on secondary data obtained through website of the specified chemical companies. To find out which one is stronger in terms of financial performances over the years; different ratios are used as analytical tool. The financial statements of all three Petrochemical companies have been studied comprehensively to compare the performances of these three companies over the period of 2015-2017. Through the studies the relative strengths and weaknesses of all three companies can be traced out. The ratios derived and calculated from financial statements helped to draw conclusions about superiority of one company over others. This study shows the profitability of each company and the competitiveness among them. The analysis also reveals whether the company's financial position has been improving or deteriorating over time.

KEY WORDS: Petro Chemical, Balance Sheet, Income Statement, Companies, Ratio Analysis, Profitability, Financial Position, Reliance Industries Ltd., Sahara Petrochemicals Ltd., China petroleum and Chemicals Ltd.

1. INTRODUCTION

Ratio Analysis is one of the important tools to evaluate the financial performance of the organization. It shows the financial Capability and profitability of the firm. It indicates relation between two mathematical expressions and the relationship between two or more things.

Ratio analysis helps management as well as creditors to make proper judgment regarding Financial Position of the firm which may leads to proper decision making for investment related matters. Financial ratios also help to evaluate the strengths and weaknesses of the firm.

1.1 Importance of Ratio Analysis

Ratio analysis could be proved helpful for every stakeholder of the firm for various decisions making. It reflects financial soundness of the firm. One can take decisions of investment after evaluation of ratio analysis.

Financial ratios allow for comparisons:

- Between distinctive periods of same company
- Between different companies for the same period
- Between distinctive periods with different companies of similar business.

The ratios can be expressed in following three forms:

- Pure Ratio: It's a simple division of one number by another. The relationship between current assets and current

liabilities is shown in this way.

- Percentage: Certain accounting ratios become more meaningful if expressed as a percentage. Normally the relationship between profit and sales is expressed in this way.
- Rate: Sometimes ratios are expressed as rates i.e. 'number of times' over a certain period.

To evaluate the performances of current year, ratios can be compared with the past year ratios. It shows the progress of the company in various terms. It is called as time series or trend analysis. It can help to evaluate the progress of the company over a period of time.

Another popular method of comparison is comparison between two or more companies with similar operations. It can be done with the help of published financial statements of the companies. It helps to understand the competitiveness of the firms and also the profitability differences over a period of time.

1.2 Profile of Companies

➤ Reliance Industries Ltd

RIL is India's largest private sector company on key financial parameters. It is a significant global player in the integrated energy value chain, and has a growing presence in the retail and digital services in India. Built on strong values, RIL is steadfastly rooted in the culture of safety, integrity and commitment. RIL is dedicated to its vision of partnering India's economic growth and social well-being. RIL strives to be a product and service leader across its industries, a great work-place and above all, to create value for its stakeholders and society. Its business includes Petroleum Refining, Petrochemicals, Exploration and Production of Oil and Gas etc.

➤ Sahara Petrochemicals Ltd.

Sahara Petrochemicals Company is one of the Saudi companies registered in Saudi financial market. Sahara Petrochemicals was incorporated on 07/07/2004. Sahara's headquarters is located in Riyadh and the company works as a holding company that focuses its main activity on petrochemical sector in KSA. Sahara, in the performance of its business, is committed to implement high quality standards of production with a great commitment to preserve the environment, the safety of its employees and society in general. The Company participates in many joint ventures with local and international partners.

➤ China Petroleum and Chemical Ltd. (Sinopec Corp.)

Sinopec Corp. is one of the largest integrated energy and chemical companies in China. Its principal operations include the exploration and production, pipeline transportation and sale of petroleum and natural gas; the sale, storage and transportation of petroleum products, petrochemical products, coal chemical products, synthetic fiber, fertilizer and other chemical products; the import and export, including an import and export agency business, of petroleum, natural gas, petroleum products, petrochemical and chemical products, and other commodities and technologies; and research, development and application of technologies and information.

2.OBJECTIVES OF THE STUDY

- To study the financial performance of Reliance Industries Ltd, Sahara Petrochemicals Ltd. And China Petroleum and Chemical Ltd. (Sinopec Corp.)
- To compare the financial performance of Reliance Industries Ltd, Sahara Petrochemicals Ltd. And China Petroleum and Chemical Ltd. (Sinopec Corp.)

3.RESEARCH METHODOLOGY

In this study, an attempt has been made to evaluate and compare the financial performance of three chemical companies of different locality.

- Reliance Industries Ltd - An Indian Company
- Sahara Petrochemicals Ltd.- A Foreign company from Saudi Arabia
- China Petroleum and Chemical Ltd. (Sinopec Corp.)– China Based Petrochemical Company

All three companies are engaged in similar operations. The study is based on Secondary data and the details are collected through websites, magazines and Journals. The time period of study is three years ranging from 2015 to 2017. Ratio analysis was applied to analyze the performance of these companies.

Following Ratios are used for this study.

- Current ratio

- Net Profit Ratio
- Stock to Working Capital Ratio
- Operating Profit Ratio
- Proprietary Ratio
- Debt Equity Ratio
- Operating Ratio
- Return on Capital Employed
- Return on investment
- Return on Proprietors Fund

The Analysis of above ratios in any industry can prove useful for managerial decision making. The Current ratio reflects the short term solvency position of the organization whereas net profit ratio reflects net profitability to sales during accounting year. Stock to working capital ratio indicates the relation between the closing stock and the firm's working capital. It helps to judge the quantum of inventories in relation to the working capital of the business. Operating Profit ratio indicates the relationship between Operating profit and the sales. Proprietary ratio compares proprietor's funds with total assets whereas Debt equity ratio compares the long-term debts with proprietors' funds. Operating ratio show percentage of total cost of goods sold to sales.

Return on Capital employed measures business's ability to generate income over capital whereas return on investment indicates potential return on total investments. Return on Proprietor's fund reveals total return on funds invested by owners whereas debt equity ratio indicates relationship between debt capital and equity capital.

3.1 Tools for analysis

For data analysis, simple charting and tabulation tools are used for this study.

3.2 Limitation of the study

Like all research work, this research work has also some limitations, which researcher wants to highlight over here. One of the characteristics of good research is to reveal the limitations frankly.

- Financial performance of companies is analyzed on the basis of selected time period.
- For analyzing financial performance only secondary data has been taken into consideration.
- Only quantitative aspect has been taken into consideration for analyzing financial performance of companies, while many a times qualitative aspect also play a major role in terms of financial performance of companies.
- This study is limited to Financial year 2015 to 2017

4. REVIEW OF LITERATURE

Ratio analysis has been used for analyzing the performance of two similar companies to "find out the strength and weakness of the companies and their position in the market" (Tirkey and Osamah, 2013).

In an old article, Davis (1976) explained the uses and the limitations of Ratio Analysis. He is of the view that Ratio Analysis can be used for investment decision and performance analysis as the past performance of a company provides clues for future performance. But he also warned that ratio analysis has the shortcoming of being dependent on the quality and quantity of data of published reports.

According to Lesakova (2007) ratios reveals much more about the company and its operation though it is only the mathematical calculation dividing one number by another number but cautioned for taking into other related considerations to get the real picture of the concern, otherwise the inferences may be misleading.

According to Hunt, William and Donaldson (1971) "Ratio is the means of expression of relationship of numbers from financial statement in the form of arithmetic." The Oxford dictionary defines ratio analysis as the mathematical relationship between two numbers. It is one of the most common and extensively used tools of financial analysis, though its role is sometimes misinterpreted. A ratio expresses a mathematical relation between two quantities (Y.A, Babalola, F.R. Abiola, 2013).

According to Lucey (1998) "Ratio analysis is the systematic product from internal and external financial reports so as to summarize key relationship and results in order to appraise financial performance". Ratio is a tool of financial analysis, which can be used as a predictive tool for measuring business performance, show areas of strengths and weakness of a company and required for management control decisions, investment decisions and credit control purpose (Elijah Adeyinka Adedeji, 2014).

Paul Barnes (1987) concluded that Financial Ratios are almost always used predicatively, either implicitly or explicitly. They are good indicators of a firm's financial position and business performance and characteristics and that they may be used to forecast future performance and characteristics. The selected topic was not taken into consideration in previous studies. The present study will focus upon the comparative analysis of financial position and operational performance of the both company.

Sardeesh Babu (1999)¹² in her study "A Study on Financial Performance of Fertilizers and Chemicals Travancore Limited". The cost on various overheads can be brought down by carefully scrutinizing each item and applying cost cutting techniques. The profitability of the company can be improved by reducing the expenses that do not contribute any productive use. The current assets can be managed efficiently by examining the material holding and stock holding procedure and pattern. If the company increase its turnover and reduces its cost, the profit will increase leading to an increases in the growth rate of sales, profit before tax and profit after tax.

Mohammed Rafiqul Islam (2000)¹³ Studied the **profitability of Fertilizer Industry in Bangladesh** from 1985 – 1986 to 1994 – 1995. The sample included fire fertilizer interstices in Bangladesh chemical industries corporation (BCIC). The findings of the study indicated that none of the selected units were consistent and all the units were plagued with declining profits. The study concluded with suggestions for improvement of the profitability of fertilizer industry in Bangladesh.

Dr. Khatik SK and Ruadeep Kumar Singh (2003)²⁶ have undertaken a case study about the **liquidity management** of Eicher Ltd. Mandideep Bhopal. The objective of the study were (i) to assess the significance of current ratio, acid test ratio (ii) to examine and evaluate the liquidity position during 1995- 1996 to 1998 -1999. The researchers observed that the short term liquidity position was not stable but management of inventory and working capital were satisfactory. The company was suggested to concentrate on management of current assets and debtors collection period to improve their liquidity position.

Narware (2004)³⁵ in his study on **Working Capital and Profitability an Empirical Analysis**, has examined the interrelationship between profitability and working capital with the assistance of ratio analysis. He has also employed correlation analysis between selected ratios relating to working capital management and ROI, multiple regression analysis has been employed to ascertain the impact of working capital and profitability. His analysis revealed that working capital management and profitability disclosed both negative and positive association.

Narware and Vivek Sharma (2004)³⁶ in their study on **Liquidity Management of Hindustan Petroleum Corp. Ltd** analyses the liquidity management during 1995 – 1996 with the help of selected ratios they concluded that there was in adequacy of funds due to a high contribution of inventory in current assets.

5. DATA ANALYSIS

A Comparative Study of Financial Statements of Reliance Industries Ltd., Sahara Petrochemicals Ltd. And China Petroleum and Chemical Corporation (Sinopec Corp.)

5.1) Current Ratio

Table 5.1: showing Current Ratio

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|------|------|------|
| Reliance Industries Ltd. | 1.27 | 0.72 | 0.70 |
| Sahara Petrochemicals Ltd. | 3.70 | 5.49 | 3.92 |
| China Petroleum and Chemical Corp. | 0.60 | 0.72 | 0.85 |

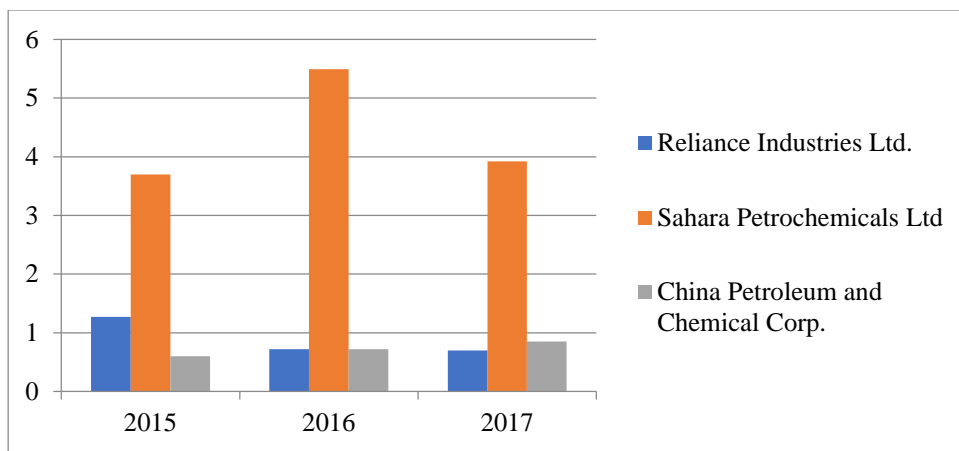


Figure 5.1

The above Table and diagram measures the relationship between the current assets and liabilities of all three companies. It reveals that short term solvency position of Sahara Petrochemicals is better than other two companies.

5.2) Net Profit Ratio

Table 5.2: showing Net Profit Ratio (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|-------|-------|-------|
| Reliance Industries Ltd. | 6.67 | 10.92 | 11.86 |
| Sahara Petrochemicals Ltd. | 20.30 | 3.03 | 22.49 |
| China Petroleum and Chemical Corp. | 1.73 | 2.15 | 3.06 |

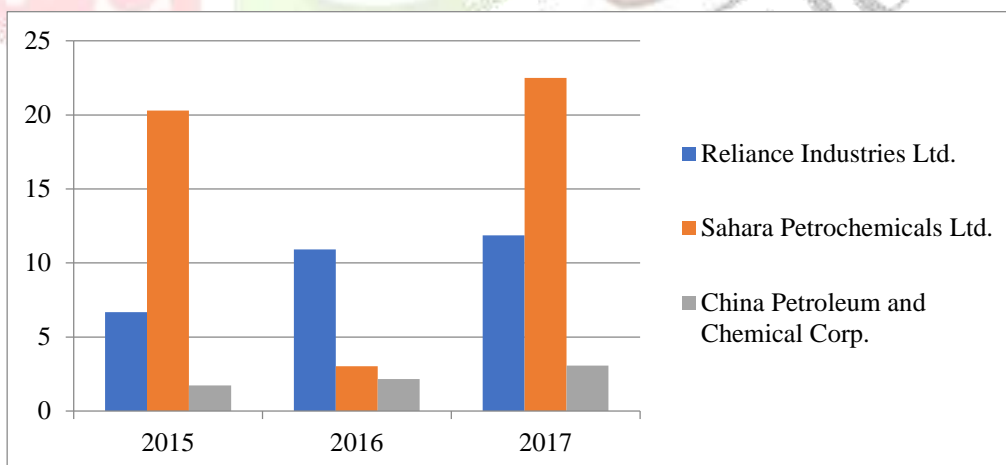


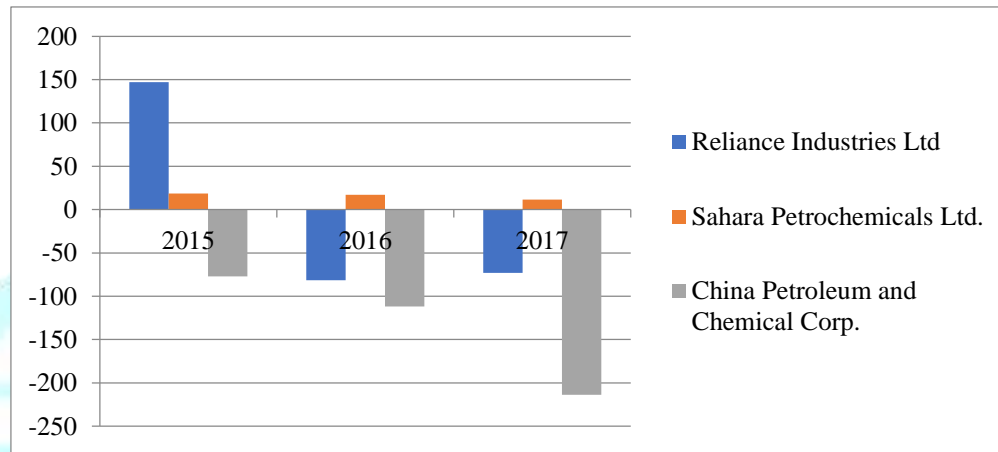
Figure 5.2

From the above table and graph it is clear that Net Profitability of Sahara petrochemicals is better in two out of three years whereas Reliance industries Ltd. Has steady growth in net profitability over the years.

5.3) Stock to Working Capital Ratio

Table 5.3: showing Stock to Working Capital Ratio (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|---------|----------|----------|
| Reliance Industries Ltd. | 147.09 | (81.36) | (73.09) |
| Sahara Petrochemicals Ltd. | 18.64 | 16.98 | 11.41 |
| China Petroleum and Chemical Corp. | (77.10) | (111.72) | (213.57) |

**Figure 5.3**

From the above table and chart it can be observed that except Sahara Petrochemicals Ltd. Remaining two companies are having negative working capital over the period of three years.

5.4) Operating Profit Ratio

Table 5.4: showing Operating Profit Ratio (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|-------|-------|-------|
| Reliance Industries Ltd. | 8.65 | 14.22 | 15.39 |
| Sahara Petrochemicals Ltd. | 13.03 | 12.39 | 19.65 |
| China Petroleum and Chemical Corp. | 2.32 | 2.58 | 4.08 |

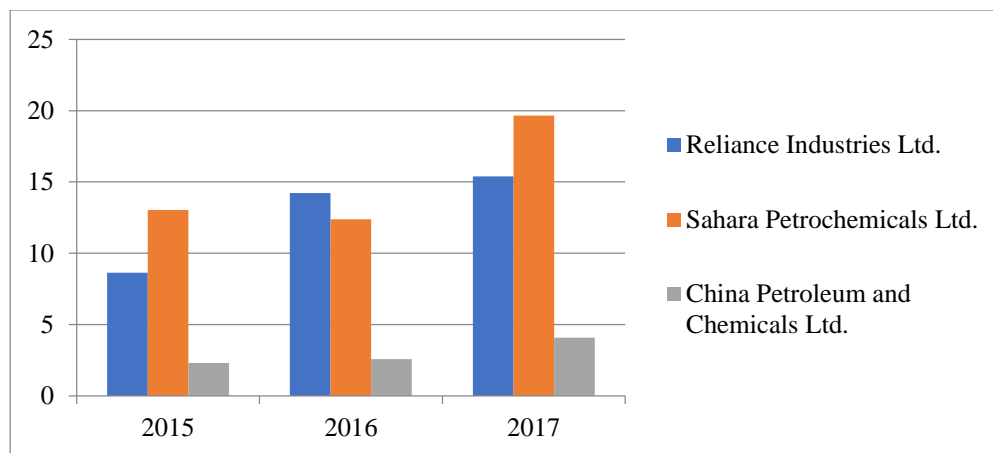


Figure 5.4

From the above chart and diagram it is clear that the operating of all three companies has consistent growth over the period of three years. China Petroleum and chemicals Ltd. Has lower operating profit as compare to other companies.

5.5) Proprietary Ratio

Table 5.5: showing Proprietary Ratio (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|-------|-------|-------|
| Reliance Industries Ltd. | 54.34 | 52.47 | 52.73 |
| Sahara Petrochemicals Ltd. | 68.52 | 64.76 | 62.62 |
| China Petroleum and Chemical Corp. | 44.59 | 46.80 | 47.53 |

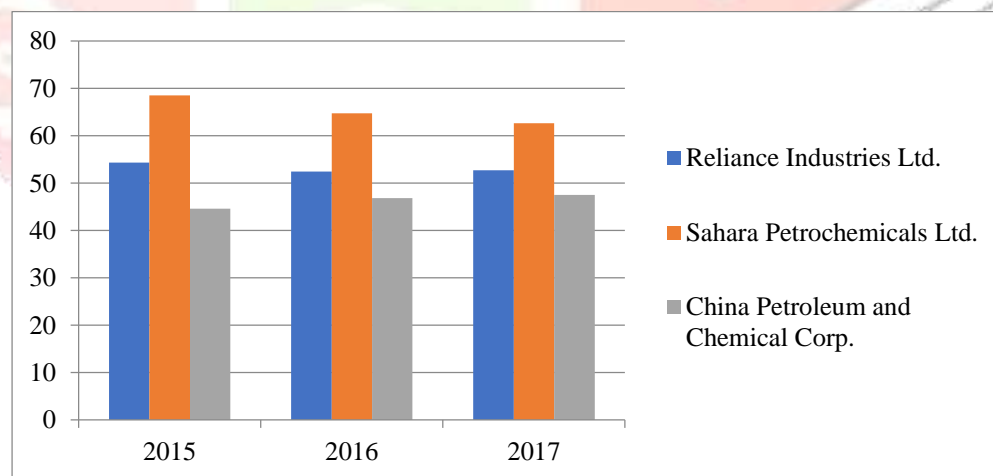


Figure 5.5

From the above analysis it is observed that there is no significance change in the proprietary ratio of all three companies over the period of three years.

5.6) Debt Equity Ratio

Table 5.6: showing Debt-Equity Ratio

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|------|------|------|
| Reliance Industries Ltd. | 0.35 | 0.32 | 0.27 |
| Sahara Petrochemicals Ltd. | 0.26 | 0.35 | 0.35 |
| China Petroleum and Chemical Corp. | 0.23 | 0.21 | 0.16 |

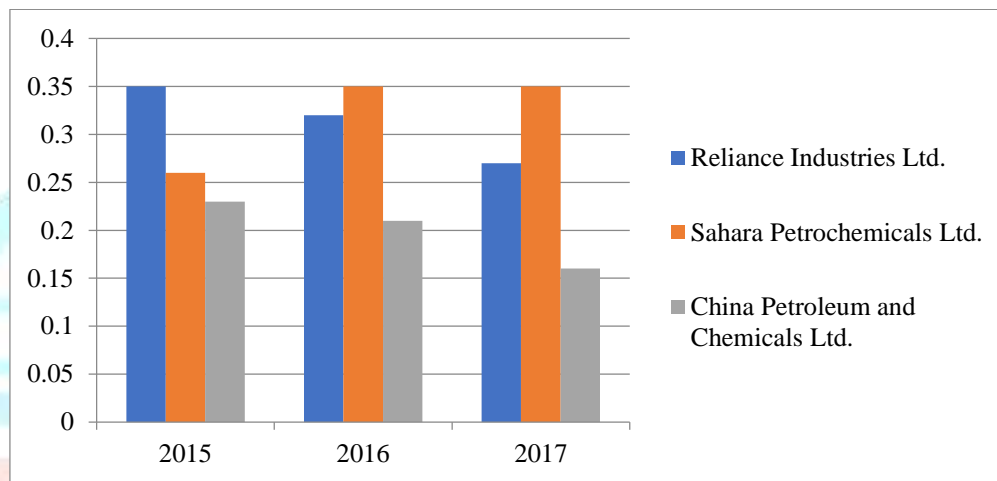


Figure 5.6

The above table and graph shows that there is a constant decrease in the Debt-equity ratio of Reliance Industries Ltd. And China Petroleum and Chemicals Ltd. whereas slight increase can be noticed in Debt-equity ratio of Sahara Petrochemicals Ltd.

5.7) Operating Ratio

Table 5.7: showing Operating Ratio (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|-------|-------|-------|
| Reliance Industries Ltd. | 90.49 | 81.66 | 87.94 |
| Sahara Petrochemicals Ltd. | 86.97 | 87.61 | 80.35 |
| China Petroleum and Chemical Corp. | 97.54 | 96.96 | 94.33 |

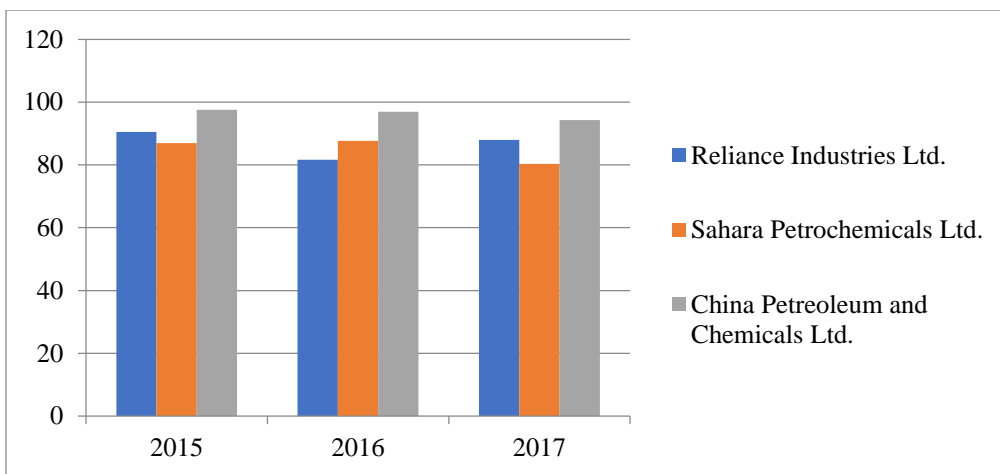


Figure 5.7

The above chart and diagram shows that the operating expenses of all three companies are nearby constant during the period of three years.

5.8) Return on Capital Employed

Table 5.8: showing Return on Capital Employed (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|------|------|------|
| Reliance Industries Ltd. | 7.41 | 7.80 | 7.46 |
| Sahara Petrochemicals Ltd. | 5.66 | 1.46 | 5.89 |
| China Petroleum and Chemical Corp. | 4.58 | 3.88 | 5.33 |

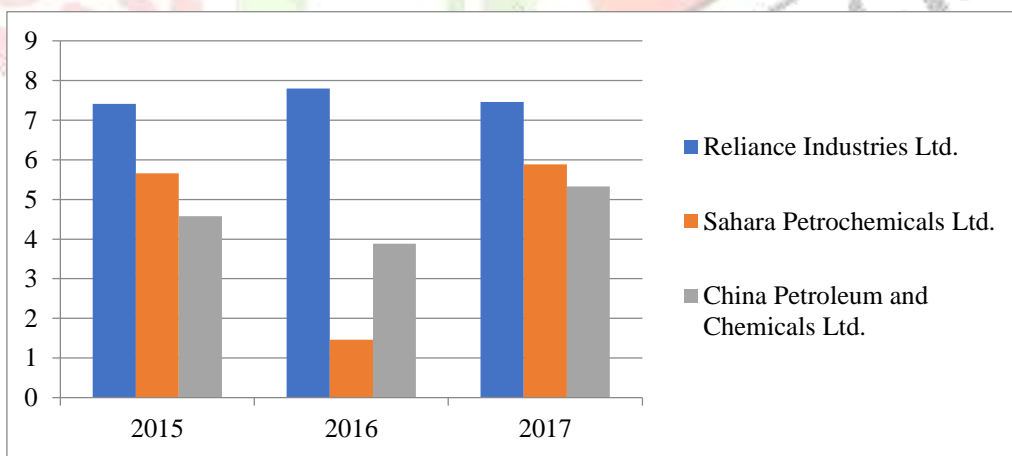


Figure 5.8

5.9) Return on Investment

Table 5.9: showing Return on Investment (%)

| Particulars | 2015 | 2016 | 2017 |
|--------------------------|------|------|------|
| Reliance Industries Ltd. | 5.71 | 6.00 | 5.75 |

| | | | |
|------------------------------------|------|------|------|
| Sahara Petrochemicals Ltd. | 4.54 | 0.51 | 4.51 |
| China Petroleum and Chemical Corp. | 3.37 | 3.00 | 3.95 |

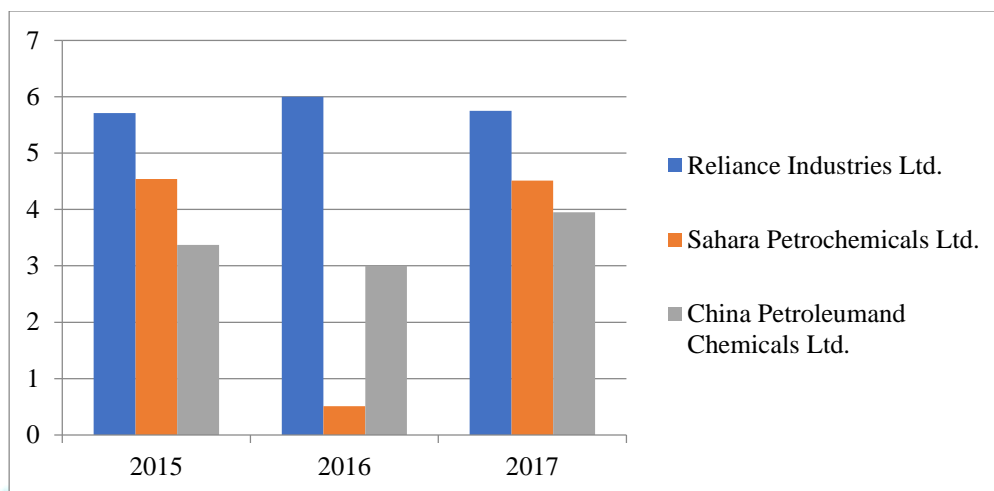


Figure 5.9

The above analysis shows that there is a noticeable fall in return on investment of Sahara Petrochemicals Ltd. In the year of 2016.

5.10) Return on Proprietor’s Fund

Table 5.10: showing Return on Proprietor’s Fund (%)

| Particulars | 2015 | 2016 | 2017 |
|------------------------------------|-------|-------|-------|
| Reliance Industries Ltd. | 10.51 | 11.42 | 10.90 |
| Sahara Petrochemicals Ltd. | 6.62 | 0.79 | 7.20 |
| China Petroleum and Chemical Corp. | 7.56 | 6.42 | 8.31 |

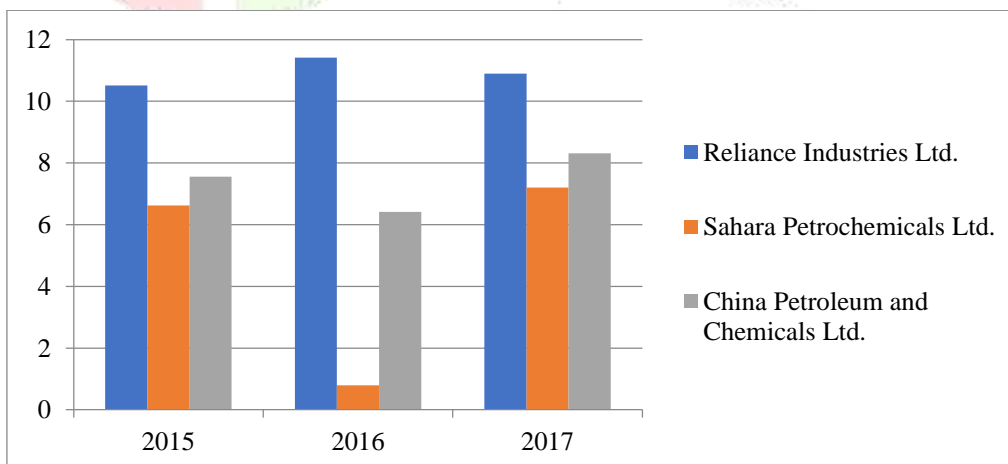


Figure 5.10

From the above chart and diagram it is clear that in the year 2016 Sahara Petrochemicals Ltd. has a great fall in Return on Proprietors fund. The same can be noticed in the analysis of Return on Investment. Reliance Industries has a greater return on its proprietors fund as compare to other two companies.

6. FINDINGS

The present study based on Comparative study of financial statements of Reliance Industries Ltd., Sahara Petrochemicals Ltd. And China Petroleum and Chemical Corporation for the period of 2015 to 2017 have produced a number of valuable findings which are very ground-breaking in nature and important to the Management of respective companies for decision making. The findings are as follows:

- The net profit of Sahara Petrochemicals Ltd. Is better than remaining two chemical companies.
- Also Current Liquidity Position of Sahara Petrochemicals Ltd. Is better than other two companies.
- China Chemicals and Petroleum Corp. Has negative working capital during the period of three years which shows that its current liabilities are more than its current assets.
- Growth can be found in operating profit of Reliance Industries Ltd. Over the period of three years whereas no significant change is noticed in the operating profit of China Chemical and Petroleum Corporation.
- Slight decline is noticed in operating expenses of Sahara Petrochemicals Ltd.
- Steady decline can be found in Debt-equity Ratio of both Reliance Industries Ltd. And China Petroleum and Chemical Corporation whereas exact reverse position can be noticed incase of Sahara Petrochemicals Ltd.
- No significant change is noticed in returns of capital employed and total investment of Reliance industries Ltd. And China Petroleum and Chemical Corporation whereas a great fall can be observed in returns of Sahara Petrochemicals Ltd. During the year 2016.
- Reliance Industries Ltd. has a greater return on proprietor's fund during the period of three years.

7. SUGGESTIONS

On the basis of above analysis and interpretations, it is clear that the operational performance of Sahara petrochemicals is comparatively better whereas the financial soundness regarding return on investment of Reliance Industries is in good position. Some operational and administrative improvements are required in China Petroleum and Chemicals Corporation. There are some recommendations and suggestions for the operational, administrative and better utilization of resources in China Petroleum and Chemicals Corporation.

There is a need to control on operating cost of production of China Petroleum and Chemicals Corporation because it is higher than that of other two companies. In this order, China Petroleum and Chemicals Corporation may consider its raw material cost and manufacturing or processing cost to reduce cost of production. For this purpose National Petrochemical China Petroleum and Chemicals Corporation may apply new improved technology for manufacturing or processing.

The findings suggests that the Reliance Industries Ltd. must be responsible to develop their liquidity position because liquidity maintains their healthy environment for business otherwise it cant develops and may lead to financial problems. Also it has to take efforts to increase its net Profitability in spite of good return on investment.

Both China Petroleum and Chemicals Corporation and Sahara Petrochemicals Ltd. should develop their overall returns on capital and investments. It will help to attract investors as well as creditors of the respective companies.

8. CONCLUSIONS

In this study, it is observed that the operational and financial position of China Petroleum and Chemical Corporation is not satisfactory when compared to Sahara Petrochemicals and Reliance Industries Ltd. In the analysis of financial position and operational performance of all three Chemical Companies various aspects are untouched, because of unavailability of required information and data. So, there is a lot of scope available to get the weak areas of National Petrochemicals and effective solution thereof.

After analyzing the above ratios it is clear that the Position of Sahara Petrochemicals is better than the Reliance Industries Ltd. And China Petroleum and Chemical Corporation As it is seen in the analysis that Current Ratio, Net Profit Ratio, Stock to working capital Ratio, Proprietary Ratio and Debt-equity Ratio of Sahara Petrochemicals is better than other two companies but at the same time we couldn't ignore the return on Capital employed, Return on Investment and Return on Proprietors Fund of Reliance Industries Ltd. As it shows better returns potentiality of the company than the other two companies.

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