A Study on Financial Performance of Gail and HPCL Oil and Gas Companies in India – A Comparative Study

S.Umamaheswari[a], M.Prakash[b]
[a]Research Scholar in Ph.D. Commerce, Kaamadhenu Arts and Science College Sathyamangalam, India

[b]Associate Professor and Head, Department of Commerce with Computer Applications, India

Abstract

The author has made a comparative study between GAIL & HPCL, the leading oil compaines in India. The objectives are to analyze the liquidity position of the selected oil companies and to provide suggestions for the improvement of the working capital management of the companies. Ratio analysis is used as a basic measure to assess the liquidity position of the oil companies taken for the study during the study period (2004-2018). It has been concluded by the author that there are wide fluctuations in the Working Capital position of the company.

KEYWORDS: GAIL, HPCL, liquidity position, Working Capital position.

Introduction:As a developing nation, India, being one amongst the largest countries, is the major importer of Oil and Petroleum products from gulf nations. Though, there are many oil reserves in our country, it is not sufficient in purview of the domestic needs of our population. India has 4,621 oil reserves as at various places as per US EIA 2017 report ranked 23rd place all over the world. In the recent times, there is hike in the prices of petrol invariably which influenced transportation rates massively. Out of the important economy sectors, Oil industry is one of the biggest employers where lakhs of employees are working within. Major oil reserves are located in Mumbai High, Rajasthan and in Bay of Bengal which are undeveloped one. The ONGC which was started in 1956, a government owned corporation contributes nearly 75% of the oil needs of India.

OIL:

Word origin:

The word “oil” is certified in English in the year 1176, derived from a French word “oile” followed from Latin word “oleum” which found its origin from Greek word “elaion” meaning thereby “olive oil” obtained from olive tree or live fruit.

Types of oils:

There are two types of oil named as organic oils and mineral oils

Organic oils:

Such oils are produced through diversity by animals, plants and other organisms through the process of metabolism occurring naturally. The word lipid by nature refers to fatty acids, steroidic and it includes chemical substances too. Whereas oil is a combination of various chemicals. Organic oils contain chemicals excluding lipids and includes waxes, alkaloids and proteins.

Mineral oils:

Mineral oil constitutes crude oil and petrochemicals which constitutes petrol and its refined components. These are the crux and crucial resources in the modern economy. Crude oil got its origin from old fossil organic material such as algae and zooplankton, by geographical factors got converted into oil. The origin of the mineral oil is unknown at the time of its discovery, because it is obtained by the movement of rocks, underground traps and sand. Mineral oil is a several and specific abstract of crude oil.

Applications of Oil:

Oil finds place in cooking, cosmetics, religion, heat transfer, painting, lubrication, fuel and as chemical feedstock.

- Cooking oil:

For cooking and foods preparation, several edible vegetable, animal oils and fats are used. It is used mainly for frying the foods hotter than boiling water. It is also used to give flavour and to add texture to the foods. Cooking oil is obtained from animal fat, as butter, lard and plants oils are extracted from olive, sunflower, maize and other species.

- Religious purposes:

In the history of decades, it is a representation of a religious application. It acts as a spiritually purifying agent and it is used for anointing purposes. Particularly, it plays an important role as a liquid used ritually for Christianity and Judaism.

- Cosmetic application:

For stabilization and the growth of the hair, oil is used to give a glowing look of the hair.

- Colour Pigment:

Color pigments are easily suspended in oil, making it suitable as a supporting medium for paints. The use of extant oil paintings were started to use from 650 AD.

- Lubricant oil:

Oil do also caters to the needs of engineering. Given that they are non-polar, oils do not easily adhere to other substances. Mineral oils are mostly used as machinery lubricants.

- As fuel:

Oils burn in liquid form or in spray form generating light and heat that can be used directly or the same can be converted into other forms of energy such as electricity or to carry out mechanical works. that can be used as electricity. To get varieties of fuel oil, crude oil is extracted or pumped from the ground which is shipped through pipeline or to a oil tanker to an oil refinery, where it is converted into varieties of oil such as diesel fuel (petrodiesel), fuel oils (the heaviest form used in furnaces/ships), jet fuel, kerosene, gasoline (petrol), ethane and LPG(Liquified Petroleum gas). All the oils are not used as mineral oils, some oils are used as bio-diesel and some oil is used for vegetable oil purposes. In the earlier centuries, especially in 18th and 19th centuries, it was found that the whale oil was used for lamps commonly, replaced with natural gas followed by electricity. Out of Export earnings, 34% is contributed by petroleum products stepping into a core contributor to GDP of our nation. The largest oil refineries in India are listed below which include refinery at Jamnagar, located at Gujarat (the largest refinery in the world) quantifying to 1.24 million barrels of crude per day.

REVIEW OF LITERATURE:

K.S.Kavitha and Dr.P.Palanivelu,[1] in their study, titled as "A Study on Financial performance of Iron and Steel Industries India", taken 21 steel companies for the study for the period from 2002-2012. They used ANOVA for data analysis. They concluded that the current ratio, liquidity ratio, debt equity ratio, proprietary ratio, fixed assets to net worth ratio and inventory turnover ratio have impact on profitability of the concern . In their study they found that the due to delays in implementation of the projects and improper planning led to increase in costs unnecessarily. And they further added that the companies should utilize its production capacity to its maximum extent possible so as to increase production. They finally concluded that the increase in production and sales will contribute to the financial performance of the companies.

Dr.S.Bama and Shenbagam Kannappan[2], in their study on "financial analysis of the Servalakshmi Paper Limited in Coimbatore" analysed about the problems of procurement of paper, production and marketing of paper and ultimate services and effective utilization of financial resources. The main objectives of the study were to evaluate the liquidity and profitability and their impact on the financial position of the concern during the period of 6 years from 2009-2014. From the research conducted, it was found out that the liquidity position was satisfactory. The fixed assets of the concern were properly utilized. It was further found out by the researcher that the inventory turnover sounds good confirming the good liquidity position in the concerns taken for the study. With regard to Debtors turnover ratio, it was not satisfactory due to fast paying accounts and due to lenient credit facilities extended by the concern. The researcher suggested that the company should try to increase its inventory in order to increase its sales and to minimize its operating expenditure, the expenses should be properly re- scheduled so as to boost its profits.

Njeru Mugambi Duncan, Dr. Agnes Njeru, Dr. Florence Member, Ondabu Ibrahim Tirimba[3], in their study on "Effect of cash management on Financial performance on deposit taking SACCOs in Mount Kenya Region", found that the SACCOs had prepared the cash budget regularly and cash forecast was done in all the SACCOs which showed to inform the critical decision to the management and the management was aware of the need of the preparation of cash budget and found among the SACCOs there are more cash shortages and less during the research period than surpluses of cash. From the study conducted, it was found out that there should be a critical review in-depth to be taken on both the internal and external factors that affect the cash position of the institution and the need of establishing good method to encourage the member's monthly contribution to increase the financial performance of the SACCOS. The null hypothesis that there is no relationship between cash management and financial performance was rejected The author finally summarized that the cash management is very essential to manage cash shortage and surplus which contribute to the liquidity position of the institution.

Sammy Afubwa Chahayo, Dr. Philemon Bureti, Dr. Juma, Dr. Cleophas M. Maende, Dr. Musiega Douglas and Mr. Romano A. Aketch (2013)[4], in their study on "Analysis of Financial Mismatch In Co-Operative Societies: A Case Of Kakamega County, Kenya" set the objectives to identify the factors that has led to financial mismatch in Kenyan SACCOs and to identify the effects of financial mismatch to the growth of SACCOs and to provide the solutions contributing to the financial mismatch. They adopted the random stratified random sampling technique. From 3070 members, 37 members were selected comprising of staff members, KATECO members and management committee members for the study. Both the primary and secondary data were utilized for the data collection. ANOVA One Way Test has been adopted for the research. The authors have concluded that poor leadership, record keeping practices, outdated cooperative laws; poor cash flow management and low interest loans that are given to members contributed to financial mismatch of SACCOs.

Kesseven Padachi(2006)[5], in his study on "Trends in Working Capital Management and its Impact on firms' Performance: An Analysis of Mauritian Small Manufacturing Firms", had intended to study about the impact of accounts receivable, inventory days, cash conversion cycle days, payment to creditors and to analyse about the trends in working capital needs of the firms taken under the study. He took 58 manufacturing firms in Mauritius for the study for the period from 1997-98 to 2002-03. The selected firms for the study were taken from five sectors namely food and beverages, leather garments, paper products, prefabricated metal products and wood furniture. They used ratio analysis, standard deviation, correlation and regression as the tools for analysis and interpretation of the data. It was deduced from the research that all the firms taken under the study had properly managed their accounts receivable as they had utilized the short term funds properly for their operating activities instead of relying on outside funds. Regarding their liquidity position, except prefabricated metal products, the small scale firms in other four sectors had less liquid assets and regarding their liquid assets to total assets, it was about 70% in case of wood and furniture sector as these would operate with less investment in fixed assets than other four sectors where production tended to be mechanized. The author finally concluded that the paper and printing industry had positive impact on profitability as they had high scores on the various components of working capital. As the working capital needs of the firms changes frequently, the firms should ensure a proper synchronization of assets and liabilities.

N.Velmathi(2011)[6] in her study on "Credit management of Indian commercial vehicle industry, studied about the credit / receivables management of Indian commercial vehicle industry concentrating on main five players in the vehicle industry namely Tata Motors Ltd., Eicher Motors Ltd,. and Swaraj Mazda Ltd.

Ford Motors Ltd and Ashok Leyland Ltd. The research study was undertaken to study the debtor's position, credit policy followed by the concern and the efficiency in the credit management of the policies. The period of the study was 1998-1999 to 2007-08. The author used the technique of ratio analysis to study the credit management of the units taken under the study. Arithmetic mean, standard deviation and co-efficient of variation were also used for the analysis. Also to identify good customers from bad customers, multiple discriminant analysis was used. While analysing the Debtors to Sales ratio, the author found that the companies taken under the study had effective control over the credit management as evidenced through mean values calculated of all the units taken under the study is less than the industry mean value. Regarding Debtors Debt Collection Period Ratio, it was further found out that the debt collection period is less when compared to industry debt collection period. Especially, Tata Motors Ltd. was very good in collection of debtor's payment than others. In case of Co-efficient of variance calculated, Eicher showed a lesser variance than the industry C.V. which proved that there was a good management of debtors than other units. ANOVA table was used to test the significant difference in debtors turnover ratio among the units taken under the study. It was inferred that there average debtors turnover ratio differ significantly among the units as the calculated F value(3.00) is greater than F critic value(2.58). It was finally concluded by the researcher that the units commercial vehicle industry in India have good management system in debtors collection and especially Swaraj Mazda Ltd. Ford Motors Ltd had to concentrate on their credit policies to manage the competition of the other units effectively in the industry.

NEED FOR THE STUDY:

The oil companies are the major contributor to the GDP of our nation. It is the industry where it provides massive employment opportunities to the people and this sector is of much importance both industrially and socially.

Profitability and liquidity are the importance factors determining the existent factors of the company. Hence it is necessary to focus on the profit position and its long withstanding capacity in the era of industrial pressures by way of competition, price fluctuations. This study would help the shareholders, the people who are dealing with the company as to debtors or creditors, the proposed investors and managers to get insight into various financial information as to the payment policies, collection procedures, trends in the industry and the people who are involved in decision making financially.

STATEMENT OF THE PROBLEM:

Oil industry is catering to the basic needs of the people and helps to improve the economic growth of the country. At present, the industry is facing the following problems mainly due to shortages in supply of petroleum crude, oil refining capacity, price hikes, technical problems, pollution, exploration of new reserves, lack of proper pricing system, low profitability, and the effective support of the government. The major challenges faced by the oil and gas companies are reduction in costs, maintenance and performance of the assets and following stringent environmental guidelines to protect the safe environment.

OBJECTIVES OF THE STUDY:

1. To analyze the liquidity position of the company
2. To suggest for its effective performance and to offer recommendations for its improved operations of the selected oil companies

METHODOLOGY:

Methodology is the systematic, theoretical analysis of the methods applied to a field of
study. It comprises the theoretical analysis of the body of methods and principles associated with
a branch of knowledge.[1]

It is a process of step by step study of the problem in relation to a particular topic followed by the collection, analysis and presentation of data. The proper research undertaken would lead to meaningful conclusions through logical analysis. A scientific approach is a very much necessity to the proper research.

FRAMEWORK OF ANALYSIS:

The technique of Ratio analysis is used for the study of profitability, liquidity, working capital position of the oil companies taken under the study. Ratio analysis is a means of better understanding of financial strengths and weaknesses of a concern. Appropriate ratios are used for calculating, analysing and interpreting the data which are secondary data.

SOURCE OF DATA:

The data used for the study is obtained from secondary data available from the annual Profit and Loss account and Balance Sheet of the selected companies. The data software packages namely CapitalPlus, Prowess and Centre for Monitoring Indian Economy Pvt. Ltd (CMIE) are utilized for collecting the secondary data. The data collected ranges for the period from 2004- 2018.

DATA COLLECTION:

The secondary data is used to collect the data for the study on selected oil companies in India. The published annual reports from CMIE, PROWESS data base and the news published in Eoncomic Times, Financial Express and other periodicals have also been used for the research study.

SAMPLE SIZE:

A comparative study is made between GAIL & HPCL.

PERIOD OF THE STUDY:

The study covers the period from 2004-2018 and each year comprises of 12 months proceeding from 1st April to 31st March.

SCOPE OF THE STUDY:

The present research study is undertaken on the analysis of financial performance of the oil companies in India through the data available from the published financial statements. The important financial parameters such as profitability, liquidity and working capital position of the oil companies are analyzed through this study. The study covers the period from 2004 to 2018. The study is limited to the usage of financial ratios and statistical indices namely mean, standard deviation, co-efficient of variation, skewness, kurtosis, have been used to analyse the liquidity, profitability and the working capital. The research can be extended to particular functional area namely production, behavior of share market prices and comparison of financial performance of private and public oil companies in India.

LIMITATIONS OF THE STUDY:

1. The study is restricted to companies in oil industry.
2. The data used for the research study has been taken from the published financial statements where reliability of the data depends on the data available in the annual reports
3. With regard to measurement of financial performance many parameters are available which vary from one to another and its application in the research differs. The uniformity in the approach and interpretation varies among the experts.

4. The research study is based on ratio analysis. It is a subjective concept with its own limitations.

ANALYSIS AND INTERPRETATION OF THE DATA

Ratios Used For Analysis

1. Current Ratio

2.Inventory Turnover Ratio

3.Debtors Turnover Ratio

Current Ratio:

It is the ratio which explains the relationship between the current assets and current liabilities. The rule of thumb for current ratio stands at 2:1.

Table 1:

Year	GAIL	HPCL
2004	1.04	0.88
2005	1.09	0.91
2006	1.20	0.94
2007	1.26	0.88
2008	1.37	0.94
2009	1.34	0.98
2010	1.22	0.81
2011	1.04	0.70
2012	0.83	0.71
2013	0.80	0.76
2014	0.89	0.82
2015	0.88	0.85
2016	0.77	0.76
2017	0.75	0.62
2018	0.73	0.57
AVG	1.014	0.81

From the above table it is revealed that the current ratio shows wide various fluctuations from 2004 to 2009 and shows a decreasing trend in the current ratio from thereafter. This reveals that the firm is not maintaining its current assets to maintain the prompt payment to creditors and the firm should adopt trade policies for proper collection of debts.

Liquid ratio:

This ratio expresses the relationship between the liquid assets and current liabilities The main constituents of liquid assets are cash, bank balances, short term investment and excludes inventory, and prepaid expenses. The rule of thumb for liquid ratio is 1:1

Table 2:

Year	GAIL	HPCL
2004	2.97	0.62
2005	3.84	0.62
2006	3.73	0.43
2007	2.78	0.38
2008	2.93	0.62
2009	2.78	0.69
2010	2.40	0.55
2011	1.81	0.66
2012	0.84	0.82
2013	1.13	1.17
2014	1.22	0.94
2015	1.19	0.58
2016	1.23	0.67
2017	1.32	0.33
2018	0.98	0.42
AVG	2.08	0.63

From the above table it is observed that the liquid ratio of the companies shows a wide fluctuations during the years taken under the study.

Inventory Turnover ratio:

It is the ratio which explains the velocity of conversion of stock into sales. A high inventory ratio efficient management of the inventory as more frequently the stock are sold.

Table 3:

Year	GAIL	HPCL
2004	18.13	9.01
2005	20.71	10.26
2006	22.74	9.21
2007	23.80	10.81
2008	24.78	8.82
2009	33.01	13.77
2010	32.21	8.67
2011	31.74	8.12
2012	24.45	9.06
2013	26.45	12.39
2014	22.59	11.66
2015	24.62	15.24
2016	29.22	12.84
2017	24.72	9.73
2018	23.77	11.28
AVG	25.53	10.72

From the above table it is inferred that inventory shows a higher trend from 2004 to 2011. And thereafter it got declined in case of GAIL and it recorded with wide various fluctuations..

CONCLUSION

The firms should take prompt measures to maintain proper current assets so as to meet its current liabilities. The selected companies for the research are maintaining liquid assets properly.

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