



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

“FUNDAMENTAL ANALYSIS OF PETROLEUM INDUSTRY”

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Abstract: The soundness of a company's financial position is related to its fundamentals. The basics provide information on a corporation. If a company is expanding profitably, increasing at a good rate, has few debts, and has enough of cash on hand, we can say that its fundamentals are strong. Instead of focusing on the daily fluctuations in a company's share price, an in-depth review of its financials is required to determine its fundamentals. Fundamental analysis is typically used by equity researchers to determine the intrinsic worth of a company's shares. A company's stock is overvalued if it trades above its inherent worth or fair value. Stocks are undervalued if they trade for less than their intrinsic value. The share price of the majority of companies, however, never corresponds with the fair value, if you pay close attention to the stock markets. Regardless of the companies' long-term growth prospects, day traders and other investors who favour short-term investment possibilities frequently invest in those equities. Long-term investors, however, typically favour to invest in businesses with strong fundamentals and disregard short-term share price fluctuations. A all type of current ratio, debt equity ratio, quick ratio, gross profit ratio etc.

KEYWORDS: analysis, intrinsic value, stock market, share price, current ratio, gross profit ratio all type of ratio include.

INTRODUCTION

Oil India Limited (OIL) is a fully integrated Exploration & Production company that has its roots in the illustrious year (1889) of Indian oil discovery. Its operations are supervised by the Ministry of Petroleum and Natural Gas, and its headquarters are in Dilijan, Assam. Offices for the Navaratnam government corporation can be found in Nojda, Uttar Pradesh, Guwahati, and Jodhpur. The second-largest National Exploration & Production Company in India is The Oil India Limited. On February 18, 1959, Oil India Private Limited was established with the goal of advancing and developing India's newly discovered oil fields at Nahar Atiya and Moran. It was a joint venture between the Government of India and the UK-based Burma Oil Company Limited in 1961. OIL was converted into a fully owned Government of India company. HPCL its headquarters in Mumbai, Maharashtra, Hindustan Petroleum Corporation Limited (HPCL) is a division of Oil and Natural Gas Corporation, which is owned by the Ministry of Petroleum and Natural Gas of the Government of India. Public sector undertakings (PSUs) with a 25% market share in India also have a strong marketing infrastructure. As of 2016, the company was ranked 367th on the Fortune Global 500 list of the largest corporations in the world. Its parent company, ONGC, holds the majority of the company's stock. On October 24, 2019, HPCL, which had previously been a part of the NIFTY 50 INDEX, was dropped. An oil and gas company owned by the Indian government is called Bharat Petroleum Corporation Limited (BPCL). It is owned by the Ministry of Petroleum and Natural Gas of the Government of India, which has its main office in Mumbai, Maharashtra. It runs two sizable refineries in Mumbai and Kochi. The second-largest downstream government-owned oil company in India, Oil Corporation, was ranked 79 2nd on Forbes's 2021 "Global2000" list and 309th on the Fortune list of the largest companies in the world in 2020. Seven SBUs (Strategic Business Units) make up the company's business, including retail, lubricants, aviation, refinery, gas, I&C, and LPG. Popular loyalty programmes like Petro cards and Smart fleet are available. The Indian government owns the crude oil and natural gas company The Oil and Natural Gas Corporation (ONGC). New Delhi serves as its registered office. The Ministry of Petroleum and Natural Gas is in charge of the operations. Approximately 70% of India's crude oil and approximately 84% of its natural gas are produced by this corporation, which is the largest government-owned oil and gas exploration and production company in the nation. The Indian government granted ONGC the Maharana status in November 2010. It was listed as the largest profit-making PSU in India in a survey conducted by the Indian government for the fiscal year 2019–20. According to Platts, it is ranked number 7 out of the top 250 global energy companies. Under the name Servo, IOCL's lubricant division conducts business. The most popular lubricant brand in both the automotive and industrial markets is Servo. According to reports, agreements have been signed with Royal Dutch Shell, Sanguinettigas, and Chevron Corporation for exclusive business plans for supply in Asia with the Indian Oil Company that are worth \$20 billion annually. An Indian government corporation is known as Indian Oil Corporation Limited (IOCL). It is owned by the Indian government's Ministry of Petroleum and Natural Gas, which has its headquarters in New Delhi. As of 2021, the government corporation is listed as the 212nd largest corporation in the world on the Fortune Global 500 list. It is the largest government-owned oil company in the nation, with a net profit for the fiscal year 2020–21 of \$6.1 billion. Indian Oil had 31,648

employees as of the end of March 2021, of which 17,762 were executives and 13,876 were not. There were 2,775 women working there, making up 8.77% of the total workforce.

OBJECTIVES

- Primary objective is To do fundamental analysis of the petroleum industry.
- Secondary objective is To analyses the profitability position of the petroleum Industry and To gain knowledge of evaluating intrinsic value of a firm.

LITERATURE REVIEW

JK Ali- neural networks: a new tool for the petroleum industry? European petroleum computer conference, 1994 Recent advances in neural networks have provided computers (and machines) with intuition-the ability to produce a reasonable result to a problem which is intractable, or unreasonably hard, to deal with by formal logical means. Neural networks can learn complex nonlinear relationships, even when the input information is noisy and less precise. Neural networks have made strong advances in pattern recognition, classification of noisy data, nonlinear feature detection, market forecasting and process modelling. These abilities make the neural network technology very well suited for solving problems in the petroleum industry. Logos journal of business-Lagos state university, OJO-june-2002 The world's petroleum industry is seen as the only international industry that concerns every country of the world. This is evident in the concern of the world to its present ever increasing price whose fluctuations are due to obvious imperfections in the market. the petroleum industry obviously divides the world, geographically, into two regions one is the region of major production and other. The region of high conception in addition, it is also the most important contributor to the world's tonnage of international trade and shipping. RT Bachmann, AC Johnson, RGJ Devean – International Bio deterioration- Biotechnology in the petroleum industry:-2014 Environmentally friendly methods with potential for enhanced oil recovery are reviewed. High bacteria and archaic diversity responsible for multifunctional oil reservoir modification. Relatively cost effective method for petroleum bio refining .Potential biocatalyst application in petroleum purification identified. Petroleum accumulation: from the continuous to discontinuous-School of Earth Sciences and Engineering, Shaanxi Key Laboratory of Petroleum Accumulation Geology, Xi'an Shi you University, Shaanxi 710065, China-2016 Traditional concept, classification and accumulation theory of petroleum reservoirs are principally derived from studies on conventional petroleum reservoirs. The petroleum reservoir formation is a process from the continuous accumulation to the discontinuous accumulation, resulting in the occurrence of continuous, quasi continuous and discontinuous hydrocarbon accumulations. Izhar Ahmad-Analysis of Financial Performance of Hindustan Petroleum Corporation Limited-April 04,2016 The Oil and gas sectors play an active role in the political and economic scenario of the globe. India stands fourth place in oil and petroleum consumption and import after United States, China and Japan. India is taking effective and efficient steps to develop its various renewable energy sources (EIA June 2014). The financial performance is the blue print of the financial affairs of a business concern. And, it reveals how a business has prospered under the leadership of its management. The survey of various review of literature indicates that, many studies have been conducted to analysis of financial performance of petroleum industry. This study is based on secondary data. Researcher has taken the data of fifteen years from 2000- 01 to 2014-15 for the analysis of financial performance of Hindustan Petroleum Corporation Limited Since 2000. The main emphasis in this study has been given to evaluate the financial performance of Hindustan Petroleum Corporation Limited with respect to measure the impact of liquidity, solvency and efficiency ratio on return on capital employed. In this study, researcher analysis the impact of liquidity, solvency and efficiency ratio on return on investment. Moreover, for testing the hypotheses of the study researcher run multiple regression analysis on SPSS Laurier L. Schramm-Fundamentals and Applications in the Petroleum Industry-2000 This chapter provides an introduction to the occurrence, properties and importance of surfactants as they relate to the petroleum industry. With an emphasis on the definition of important terms, the importance of surfactants, their micellization and adsorption behaviours, and their interfacial properties are demonstrated. It is shown how surfactants may be applied to alter interfacial properties, promote oil displacement, and stabilize or destabilize dispersions such as foams, emulsions, and suspensions. Understanding and controlling the properties of surfactant-containing solutions and dispersions has considerable practical importance since fluids that must be made to behave in a certain fashion to assist one stage of an oil production process, may require considerable modification in order to assist in another stage. Sofa Amirah Raya-A critical review of development and demulsification mechanisms of crude oil emulsion in the petroleum industry-January 14,2020 The need for efficient emulsification process to treat emulsions in the petroleum industry is well acknowledged. For decades, numerous researches have been conducted to examine mechanisms of emulsification and demulsification. Untreated emulsion has both technical and commercial implications in the industry, especially in terms of treatment facilities, refining and transportation. Effective treatment is needed to ensure optimum production of hydrocarbons. The present paper is to review reported works on the formation of petroleum emulsions, emulsification treatments, characteristics of fit-for-purpose demulsifiers as well as research trends in emulsion treatment. Crude oils are naturally combined with natural surfactants having high tendency to form stable emulsion. The stable emulsion must be treated well to meet industrial requirements since crudes with a high volume of stable emulsion have a less value. Therefore, fundamental studies on natural surfactants, which contribute to the emulsion stability, are analysed for the effective separation of emulsions into oil and water. This would involve the assessment of various reported mechanisms for the emulsification and right formulation for effective emulsification Thorn-Three-phase flow measurement in the petroleum industry-October 29,2012 The problem of how to accurately measure the flow rate of oil-gas-water mixtures in a pipeline remains one of the key challenges in the petroleum industry. This paper discusses why three-phase flow measurement is still important and why it remains a difficult problem to solve. The measurement strategies and principal base technologies currently used by commercial manufacturers are described, and research developments that could influence future flow meter design are considered. Finally, future issues, which will need to be addressed by manufacturers and users of three-phase flow meters, are discussed. Kristian S. Gould-Human Reliability Analysis in Major Accident Risk Analyses in the Norwegian Petroleum Industry-March 4, 2016 Major accidents in the petroleum industry can have severe consequences for people and the environment, as seen in recent cases such as the Deepwater Horizon. Human factors have been shown to play an important role both in the cause and mitigation of these accidents. However, major accident risk analyses in the oil and gas industry has previously not included assessments of human reliability. As part of our company's overall safety strategy, we have recently made an effort to apply human reliability assessments in major accident risk analyses of offshore activities such as drilling and production of oil. This paper outlines our strategy for use of human reliability assessment, our experiences from practice, and methodological challenges that must be improved for it to become established in the offshore petroleum industry.

RESEARCH DESIGN AND DATA COLLECTION METHOD

Research design:

The logic or master plan of a research that clarifies how the study is to be carried out can be thought of as the research design. It demonstrates how each of the key components of the study the samples or groups, the measurements, the treatments or programmers, etc. works in concert to try to answer the research questions. An architectural plan is similar to a research design. The research design can be thought of as the implementation of logic in a series of steps that maximizes the reliability of data for a particular research problem. The researcher must use facts and information that are already available, analyses them, and then critically evaluate the material in this study using an analytical research design.

Population:

Population refers to the entire collection of respondents who satisfy the specified set of requirements. All of the listed companies in the petroleum industry could be considered the population for this study.

Sampling:

The research is based on secondary data, the samples were taken on the basis of market capitalization of the companies. The study is done over five petroleum companies.

Sampling Techniques:

Sampling Technique used for this study is Judgmental Sampling. Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and professional judgment.

Data Collection Techniques:

For my research Study I select secondary data source. With the use of this data we can do evaluation. Some of Secondary data source are as below.

- Annual report of the petroleum company
- Statistical statement provided by petroleum companies
- Various Company websites.

Data Analysis Tools and Techniques:

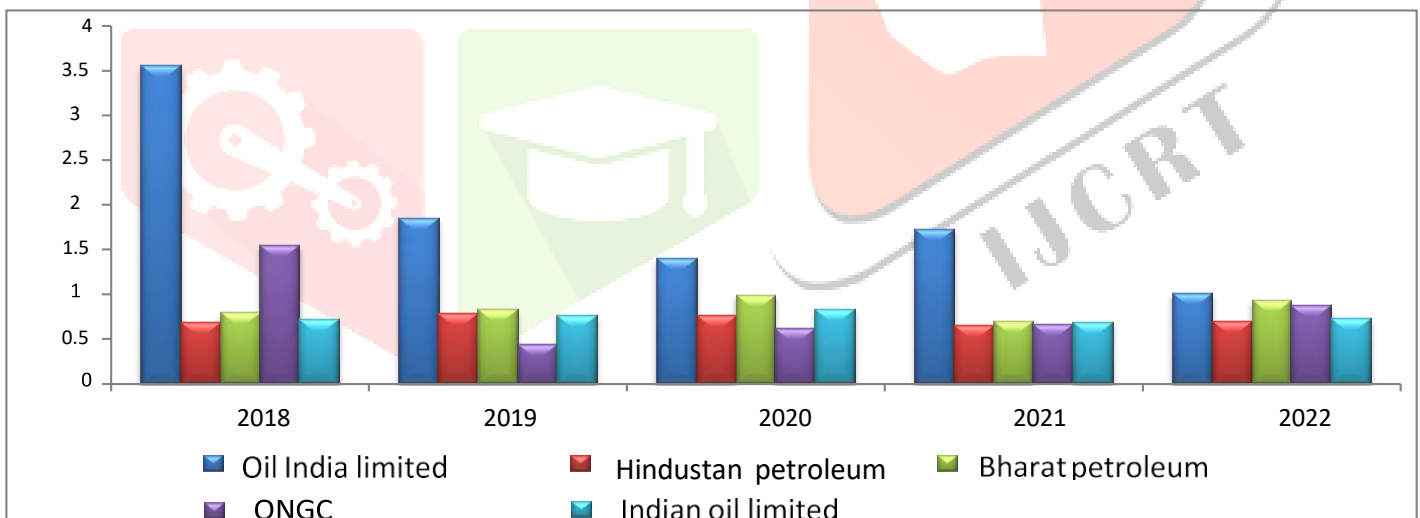
- For undertaking economy analysis economic indicators are used as tools. The economic indicators taken into consideration.
- GDP growth rate, Inflation rate, Balance of payments, foreign trade policy, Interest rate, Exports, Imports, Exchange rate of rupee, monetary policy.

RESULT

CURRENT RATIO:

Current ratio establishes the relationship between current assets and Current liabilities. It attempts to measure the ability of a firm to meet its Current obligations. In order to compute this ratio, the following formula is used.

$$\text{CURRENT RATIO} = \text{CURRENT ASSETS} / \text{CURRENT LIABILITIES}$$

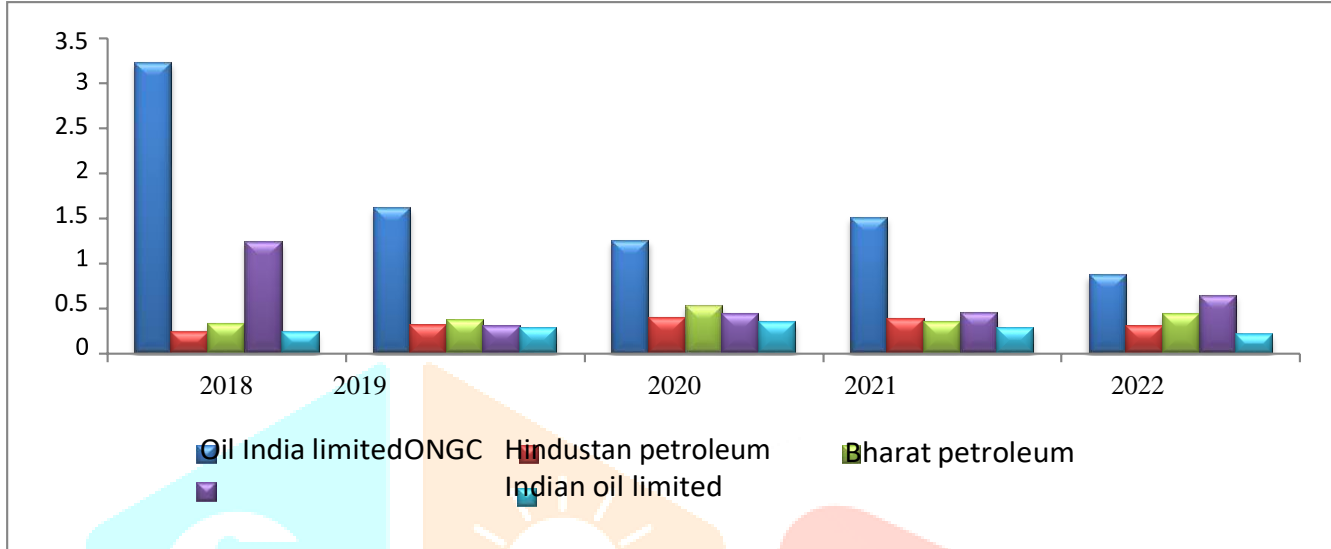


The table below displays the current ratios for the aforementioned five organizations based on data from 2018 to 2022. A 2:1 current ratio is regarded as optimal. Oil India Limited has the highest current ratio of all the firms. Therefore, it is clear that the ratio has significantly decreased, indicating more effective resource allocation, while the ratio of the other company is the lowest; if it is less than 2, its liquidity position is weak. It implies that it might not be able to fulfil its duty should it become due in the near future.

QUICK RATIO:

Acid Test and Liquid Ratio are other names for the Quick Ratio. In addition to the present ratio, it exists. The acid test ratio is a stricter test that determines if a company will be able to pay its short-term debts when they are due. The relationship between due is established by the quick ratio. The formula shown below is used to calculate this ratio.

QUICK RATIO = CURRENT ASSETS – INVENTORY / QUICK LIQBLITIES

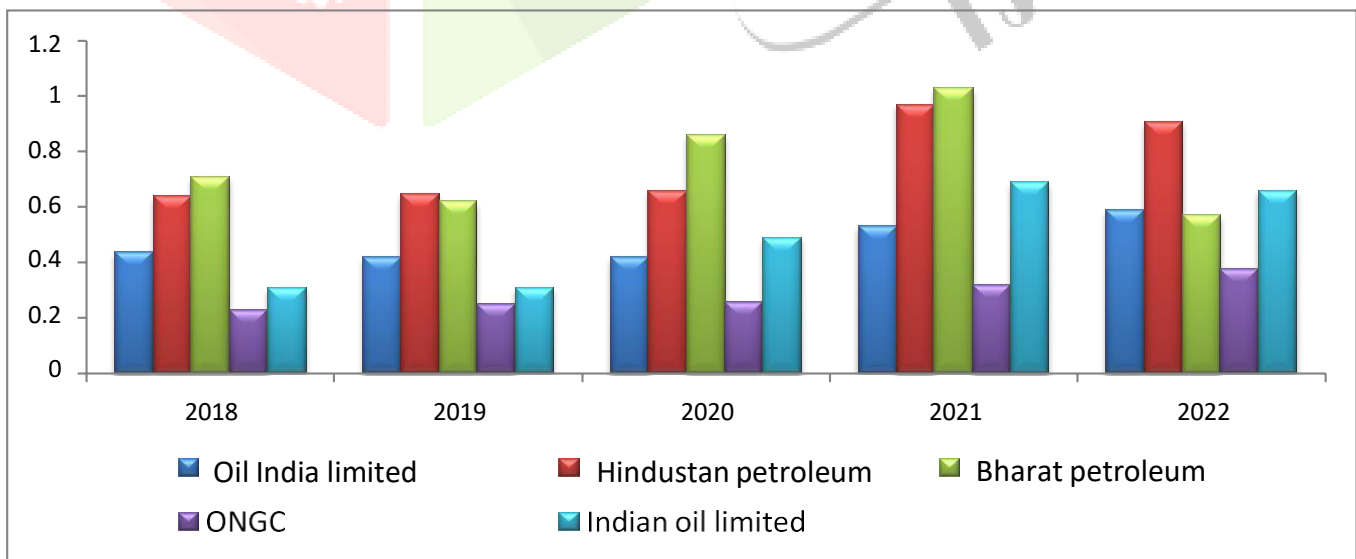


A quick ratio of 1:1 is considered satisfactory. Oil India limited has greater than 1 quick ratio but others all company ratios is less than 1 which means that company rely too much on inventory to meet its short term liabilities. This indicates that the companies have fast moving inventory. On the other hand other company quick ratio of high so company can consider using excess funds to be invested in more profitable venture or to be returned to shareholder in the form of increased dividend payment.

DEBT EQUITY RATIO:

This ratio also termed as External - Internal Equity Ratio. This ratio is calculated to ascertain the firm's obligations to creditors in relation to funds invested by the owners. The ideal Debt Equity Ratio is 1: 1. This ratio also indicates all external liabilities to owner recorded claims. It may be calculated as.

DEBT EQUITY RATIO = TOTAL DEBT / NETWORTH

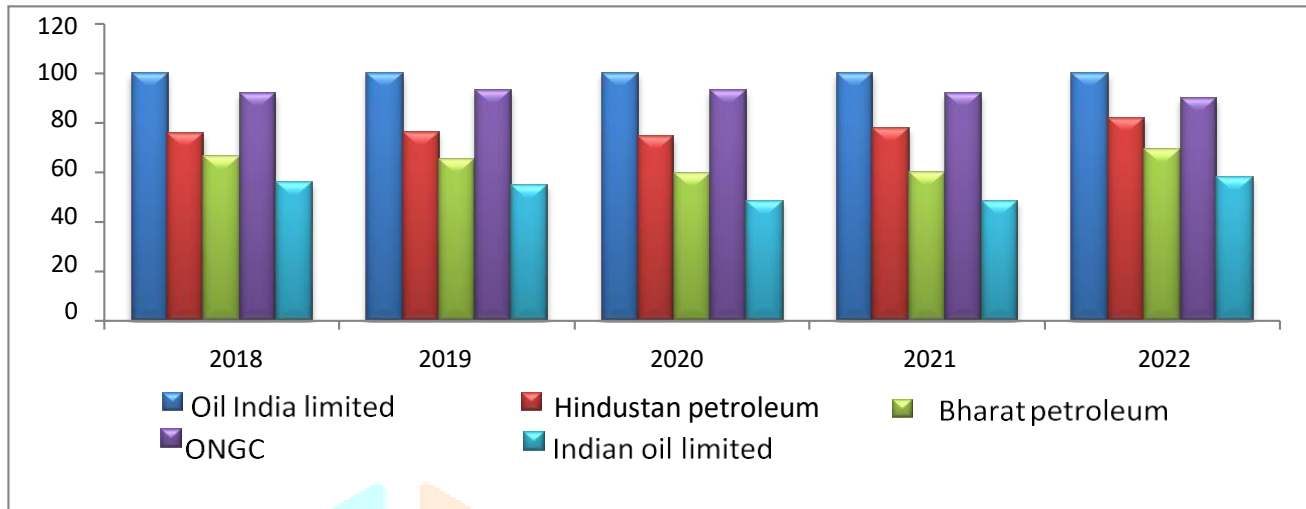


As per data, Lower values of debt-to-equity ratio are favorable indicating less risk. Higher debt-to-equity ratio is unfavorable because it means that the business relies more on external lenders thus it is at higher risk, especially at higher interest rates. Typically, it's best to have a debt-to-equity ratio below 1.0 all the companies has debt equity ratio less than 1.0 it indicates that the company is getting more of its financing by borrowing money, which subjects the company to potential risk if debt levels are too high.

GROSS PROFIT RATIO:

Gross profit ratio established the relationship between gross profit and net sales. This ratio is calculated by dividing the gross profit by sales. It is usually indicated as percentage. In order to compute this ratio, the below presented formula is used.

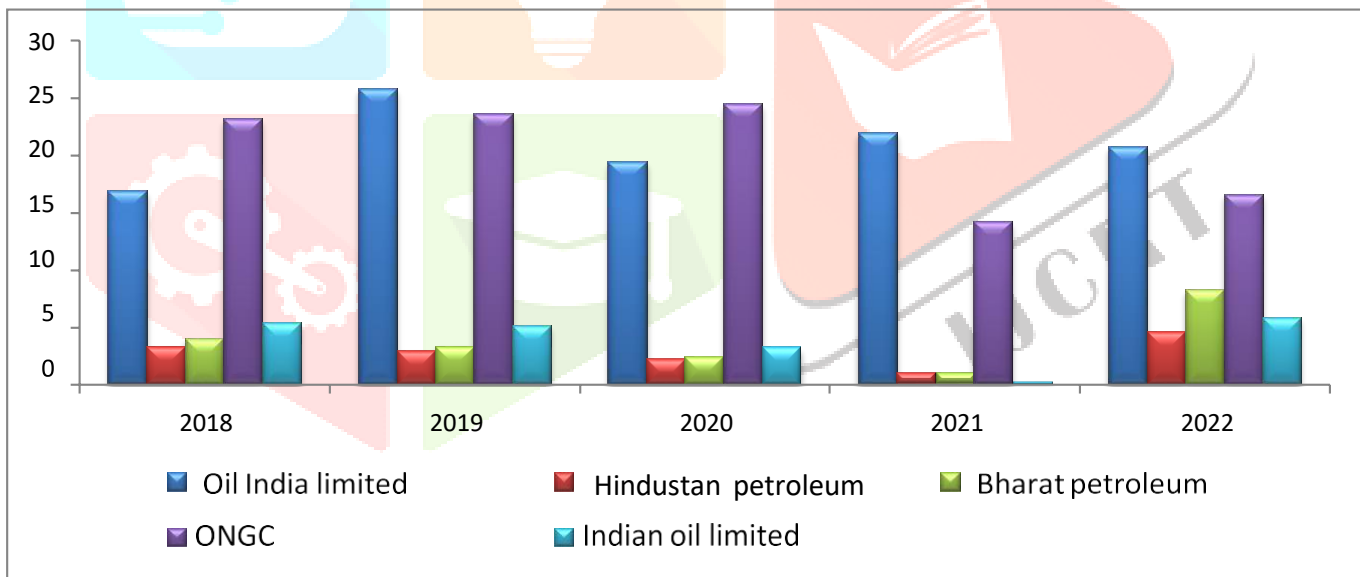
$$\text{GROSS PROFIT RATIO} = \text{GROSS PROFIT} / \text{NET SALES} * 100$$



NET PROFIT RATIO:

Net profit ratio is also termed as sales margin ratio (or) profit margin ratio (or) net profit to sales ratio. This ratio reveals the firm's overall efficiency in operating the business. Net profit ratio is used to measure the relationship between net profit (either before or after taxes) and sales. This ratio can be calculated by the following formula.

$$\text{NET PROFIT RATIO} = \text{PAT} / \text{NET SALES} * 100$$



As per the data Oil India Limited and ONGC has high net profit margin than other companies. Having a good net profit margin can be a result of efficiency in operations and level of gearing in the companies. Hindustan Petroleum Bharat Petroleum and IndianOil Limited have decreasing net profit margin so incurring a loss and hence investors mayhesitate to invest in those companies.

CONCLUSION

The main objective of fundamental analysis of Petroleum industry is to evaluate the management of the property and make internal financial decisions and show that which company liquidity, profitability and solvency position is good. And investor was help to that investing money in that company. The profitability position of Oil India Limited and ONGC companies are better than other company. And I conclude that liquidity of Oil India Limited mostly better than other company position Hindustan Petroleum and Bharat Petroleum has investment ratio is higher than other company so that investor was easily take decision about which company gave better return in future. So investor was attracting in this companies in investment. Position of Hindustan Petroleum and Bharat Petroleum are good in management efficiency ratio. And at the end I conclude that ratio analysis is the most important that provides measure of comparison between different companies. It is providing the idea for the future performance of the company and it is also helpful to know the profitability, liquidity, efficiency & solvency of the company. It is important for the company and investors. It is used to evaluate a number of issues with an entity, such as its liquidity, efficiency of operations, and profitability. This type of analysis is particularly useful to analysts outside of a business, since their primary source of information about an organization is its financial statements.

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