Financial Performance Analysis of Oil and Gas Industry in India: A Case Study of selected Maharatna Companies.

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Abstract- **By effectively developing linkages between the items on the profit and loss statement and the balance sheet, the financial performance analysis identifies the firm's financial strengths and shortcomings. It frequently aids in evaluating a firm's output and productivity, profitability, liquidity, working capital, fixed assets, money flow, and social performance. In this study, the financial performance of 5 Maharatna companies are examined. The companies taken in our study is ONGC, IOCL, HPCL, BPCL and GAIL. The various ratios taken in our study are liquidity, leverage, profitability and activity ratio. The data is taken for a period of five year. The analysis shows that all the Maharatna oil companies shows a mixed trend over the last five years.**

Keywords: **Maharatna Oil Companies, Liquidity, Profitability, Leverage and Activity ratios**

INTRODUCTION:

Financial performance analysis involves correctly establishing the link between the components of the balance sheet and profit and loss account in order to determine the firm's financial strengths and weaknesses. Financial performance analysis may be used to identify growth as well as aid in short- and long-term forecasts. The definition of "analysis" in the dictionary is to resolve or divide anything into its constituent pieces in order to trace their connections to the object as a whole and to other things. In order to better comprehend the status and performance of the company, the analysis of financial statements involves assessing the link between the component of financial statement. The management of the company may do this study, or parties not affiliated with it, such as owners, creditors, and investors, may do so.
One of India's eight core businesses is the oil and gas industry, which has a significant impact on all other significant economic sectors. Energy demand in India and economic growth are strongly tied, therefore, the need for oil and gas is projected to grow more, thereby making the sector quite conducive for investment. India retained its spot as the third-largest consumer of oil in the world as of 2021.According to IEA (India Energy Outlook 2021), as the nation's gross domestic product (GDP) is anticipated to rise to US$ 8.6 trillion by 2040, primary energy consumption is anticipated to nearly double to 1,123 million tonnes of oil equivalent.

Status of Maharatna Companies:

Net Profit	More than Rs. 5,000 crore of Net Profit for three consecutive years
Turnover	Average annual turnover should be more than Rs. 25,000 crore for three years
Net worth	More than 15,000 crore for three years
Applicability	Should have universal operations or footprints

Statement of Problem:

Financial Performance is a process to investigate and appraise a company's financial position with regard to its assets, liabilities, expenses and revenues. In this study, an effort is made to determine the financial soundness of the firms. The study focus on the financial health of the oil and gas industry to find out the effective utilization of funds. The price

fluctuation faced by the petroleum industry in today's framework will help us to analyse the financial aspect in a better way.

Scope of the study:

The present study determines the financial performance and financial health of the oil and gas industry. The study analyse the liquidity, solvency, efficiency and profitability ratio of the Maharatna oil and gas companies. The study promotes to examine the overall financial soundness by inspecting the financial ratios.

2. Literature Review:

2.1 Financial Performance-

Dr. Sandeep Goyal (2011) analyzed the financing pattern of two leading business enterprise in the heavy electrical sector with diverse nature of funds, viz. BHEL and L&T with regard to pecking order approach in their capital structures. A deliberate attempt has been made in choosing the companies, i.e. BHEL has been taken from public sector and L&T has been taken from private sector. The reason behind this is to appreciate the diverse financing practices of two units in the same sector. It was that BHEL was going for the pecking order dimension in its capital structure, whereas pecking order fails in case of L&T.

Bhunia et al. (2011) in their study focused on two publicly traded medicine and pharmaceutical companies that are listed on the BSE, the financial strengths and shortcomings were found. They took into account the strengths, weaknesses, opportunities, and threats in public sector drug and pharmaceutical firms and utilised SWOT analysis to overcome the weaknesses and seize the possibilities. They came to the conclusion that the market was expanding faster than average and that growth over the previous ten years was notable. They recommended diversifying exports to untapped international markets as a way to seize the potential.

(Uma et.al, 2018) in their study "A study on financial analysis of Hero Motocorp Limited". It is the largest manufacturer of two wheeler in the world. With 54.6% of the domestic motor market, the business is still in first place. It aspires to generate 10% of its income from foreign markets. According to this study, management also fails to adequately take into account the shift in price levels brought on by inflation.

Suman Rana (2019) the study evaluated the "Financial analysis of Tata motors and Maruti Suzuki" to evaluate each company's success. The data was gathered through secondary sources, and procedures like ratio analysis were applied. In terms of payment ratios, Tata Motors was more adept than Maruti Suzuki, yet Maruti Suzuki's overall volume is more effective.

Dr. Ruchika Gahlot (2019) in her study titled "Financial performance analysis of Maharatna companies" analysed the financial performance of five companies from different sectors enjoying the Maharatna statues. The study was carried out for a period of five years. The study inspect the liquidity, profitability and solvency position of the selected companies on the basis of data collected from their corresponding websites. The study conclude that in terms of liquidity coal India limited has been the most liquid company. NTPC and SAIL showed higher debt equity ratio. ONGC and NTPC enjoy higher operating profit margin. The study highlights the companies with high liquidity and low debt suffer from low profitability. Due to this the creditors do not consider them as a safe option to invest. The study exhibit that NTPC and Coal India are growing industries enjoying enhanced efficiencies.

Gurunathan and Ahuja (2020) in their paper titled "Financial Performance of Housing Finance Companies in India" examined the operation of housing finance in India during the period of 2014-2019. The financial feasibility of the housing finance companies was analysed on few parametres like liquidity, solvency and profitability ratios. The study aims to draw comparative analysis of housing finance companies during the five years period from 2014-2019.

2.2 Profitability Analysis:

Misra and Mishra (2006) in their study "Factors Influencing Profitability of Sugar Industry: An Econometric Analysis highlight the elements affecting the profitability of sugar industries. The study revealed various factors that leads to disparity in profits, that is liquidity ratio, operating cost ratio and asset turnover ratio.

Sunil Kumar (2008) in his study "Profitability Performance Analysis of SBI" explored the. nvestigate the connection between Technical Efficiency (TE) and Profitability in Indian Public Sector Banking. The study shows score for each bank in 2005 was calculated using the Data Envelopment Analysis (DEA) method. If public sector banks function at the "efficiency frontier," they may generate 1.13 times as much output from the same inputs. The technical inefficiency of 20 inefficient banks ranges from 2.6% to 36.8%.

Maisuria and Allad (2016) conducted a comparative study on "Profitability Analysis of Selected IT Companies - A Comparative Study". TCS, Infosys, Wipro, Tech Mahindra, and Oracle Financial Services were selected based on sales figures as part of a five-year study from April 2011 to March 2015. A nonprobability sampling method was used in this study and we used ANOVA and ratio analysis to analyze the financial statements of selected Indian IT companies. As a result of the analysis, among the selected companies Oracle Financial Services' financial performance has been highly satisfactory in terms of: High net profit margin and EPS, but low net worth ratio and employee profit ratio sound. Select

to compare net income and return on capital employed enterprise. Among other companies, TCS was the highest, Tech Mahindra was the Lowest performer, Infosys pays the highest EPS whereas, WIPRO pays the lowest EPS.

Lakhina and Didwania (2022) in their paper titled "Performance of Selected Companies of Iron and Steel industry in India: In Special Reference to Profitability and Liquidity" analysed the profitability and liquidity position by investigating the statistical relationship among the determinants. The study highlighted the relevance of operating profit and debtors turnover period to sustain the liquidity of the company.

2.3 Liquidity Analysis:

Sudipta Ghosh (2008) analysed a case study on Liquidity Management of Tata Iron and Steel Company. Based on current ratio and quick ratio, the liquidity position of the company showed unsatisfactory results with a fluctuating trend. The study recommended proper management of current assets to regulate the liquidity position.

In his work, **Pasupathi (2012)** attempted to examine the Operational Adequacy of management of Working Capital in a Few Indian Automobile Industries. It covers seventeen significant components of the car industry. The study covered 15 years, starting in 1992 to 2007. To achieve its objectives, the study used a range of financial ratios, including employed discriminant analysis to assess the working capital's sufficiency.

2.4 Solvency Analysis:

S.C. Bardia(2012) in his paper titled Predicting financial distress and evaluating ling term solvency: An Empirical Study highlight the financial distress using financial ratio. The study highlights the long-term solvency position of Steel Authority of India Limited and Tata Steel Limited. The study analysed the association of financial leverage on firms performance and forecast the financial distress using Altman's Z score model. The study recommended the firm to review the solvency position carefully by working on their respective parametres and to avoid the risk of instability of capital, goodwill and stakeholders confidence.

3. Objective of the Study:

1. To understand the concept of Firms performance through various ratio analysis
2. To analyse the financial performance of top five Oil and gas companies enjoying the Maharatna Status.

4 Research Methodology:

The study is based on secondary data. The information was gathered from publicly available annual reports of oil industry businesses. The top five oil firms with "Maharatna status" provided the information.

Period/Duration of the Study:

The present study covers the five financial years from 2018 to 2022.

Description of Maharatna Oil Companies taken in our study are as follows:

S.no	Name of Companies	Profile of the Company
1	Oil and Natural Gas Corporation (ONGC)	It is one of the largest oil and natural gas company in India by contributing around 71% to domestic production.
2	Indian Oil Corporation Limited	IOCL is considered the most diversified and integrated energy by contributing in all the major oil and gas sector. In the year 2022, IOCL maintains the top position in fortune Global 500 in energy PSU.
3	Hindustan Petroleum Corporation Limited	The company recorded it highest annual revenue sales in the year 2022. It ranks 367th in Fortune Global 500 index.
4	Gas Authority of India Limited	In India, the first company to transport natural gas on open access basis is GAIL.
5	Bharat Petroleum Corporation Limited	It is the second largest government owned oil company in India. On the 2020 Fortune list of the largest public sector undertakings worldwide, it was rated 309th in India.

Source: Author Compilation

5. Data Analysis:

5.1 Liquidity Ratio:

It measures the firm's capacity to fulfil its present obligations. Current ratio is the most popular ratio that shows the level of liquidity. This study is crucial for creditors and lenders who want to get a sense of a borrower's or customer's financial status before extending credit to them.

Table. 1 Current Ratio

S.No.	Company's Name	2022	2021	2020	2019	2018
1.	ONGC	0.98:1	0.86:1	0.56:1	0.61:1	0.44:1
2.	IOCL	0.76:1	0.73:1	0.69:1	0.81:1	0.76:1
3.	HPCL	070:1	0.70:1	0.65:1	0.76:1	0.78:1
4.	GAIL	1.10:1	0.86:1	0.97:1	1.10:1	1.02:1
5.	BPCL	0.76:1	0.93:1	0.70:1	0.99:1	0.83:1

Source: Annual Report

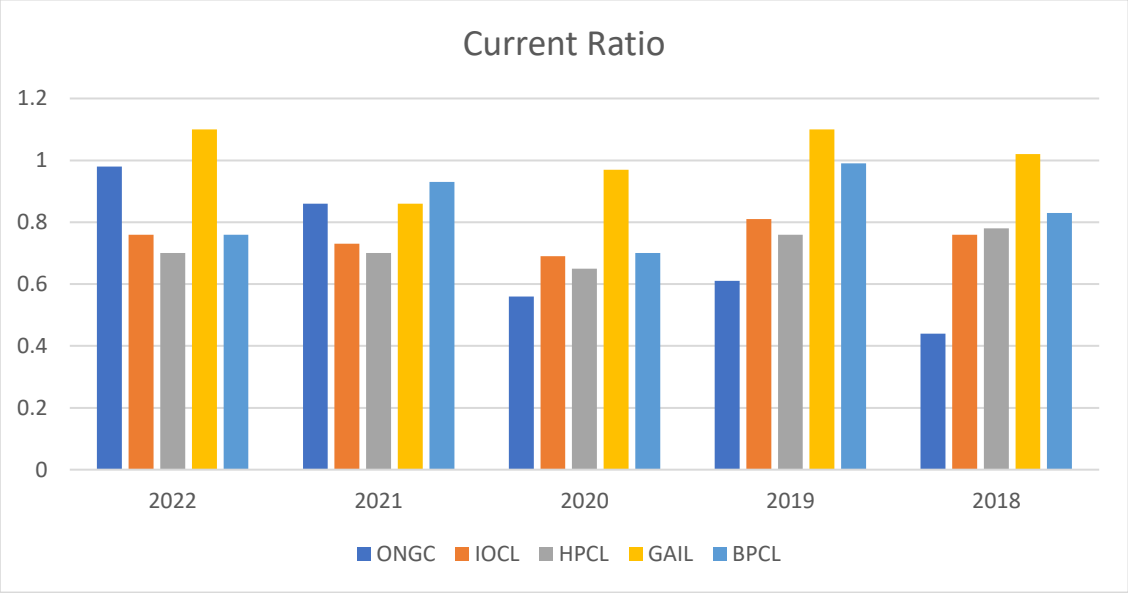

Fig. 1 Current Ratio of the selected companies

Interpretation: From the graph we can analyse that GAIL enjoys a higher current ratio as compared to other selected oil companies except the year 2021. The performance of current ratio of all other selected companies is desirable therefore the liquidity ratio is said to be satisfactory.

5.2 Leverage Ratio: The firm's long-term financial soundness is more important to long-term creditors like debenture holders and other financial institutions. Ratios of the capital structure or financial leverage are computed to assess the firm's long-term financial status.

Table 2 Debt equity ratio

S.no	Company Name	2022	2021	2020	2019	208
1	ONGC	0.03:1	0.07:1	0.07:1	0.11:1	0.13:1
2	IOCL	0.84:1	0.85:1	1.16:1	0.76:1	0.49:1
3	HPCL	1.12:1	1.11:1	1.40:1	0.97:1	0.88:1
4	GAIL	0.15:1	0.14:1	0.13:1	0.03:1	0.06:1
5	BPCL	0.49:1	0.39:1	1.15:1	0.74:1	0.67:1

Source: Annual Report

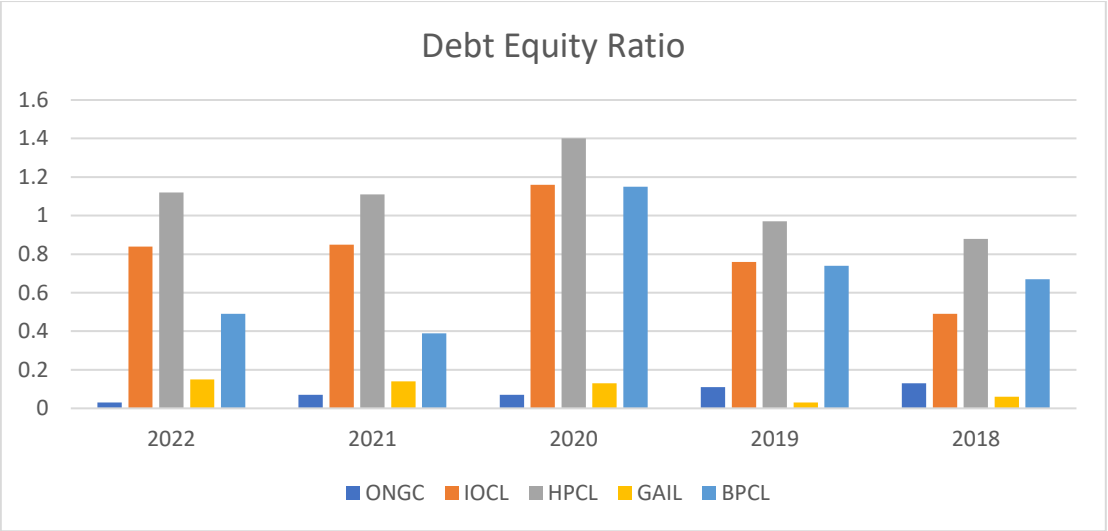

Fig. 2 Debt Equity Ratio of selected companies

Interpretation: From the above figure we can conclude that out of all the selected maharatna companies, HPCL has the highest leverage ratio and in the year 2020 highest debt equity ratio of HPCL has been the highest.

5.3 Profitability Ratio: A company's capacity to generate profits from sales or activities, balance sheet assets, or shareholders' equity is evaluated using profitability ratios. They demonstrate how well a business produces revenue and wealth for shareholders. The profitability ratios are computed to assess the business's operational effectiveness. We should continually assess the company's profitability in order to determine how effective it is.

Table 3. Gross Profit Margin

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	55.72	49.30	48.57	53.12	52.81
2.	IOCL	7.95	11.27	4.60	7.00	10.16
3.	HPCL	3.75:1	8.03:1	2.59:1	4.75:1	5.70:1
4.	GAIL	17.32	14.89	13.61	14.77	16.06
5.	BPCL	5.13	9.23	3.41	5.02	6.24

Table 4: **Net Profit Margin**

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	36.53	16.51	13.98	24.37	23.47
2.	IOCL	4.04	5.77	0.27	3.20	5.03
3.	HPCL	1.82	4.57	0.98	2.19	2.89
4.	GAIL	11.31	8.62	9.21	8.02	8.60
5.	BPCL	2.42	8.18	0.94	2.39	3.37

Table 5: Operating Profit Margin

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	49.81	38.81	42.22	46.26	43.53
2.	IOCL	5.96	7.34	2.05	4.97	7.74
3.	HPCL	2.48	6.44	1.47	3.59	4.86
4.	GAIL	15.09	11.36	11.64	12.71	14.22
5.	BPCL	4.46	7.36	2.33	4.02	5.01

Source: Secondary data

Table 6: Return on Capital Employed

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	14.43	6.12	10.96	16.61	12.56

2.	IOCL	17.65	17.90	8.59	18.14	24.86
3.	HPCL	10.43	20.92	6.63	19.73	22.43
4.	GAIL	17.06	8.99	13.59	15.95	14.08
5.	BPCL	17.06	8.99	13.59	15.95	14.08

Source: Secondary data

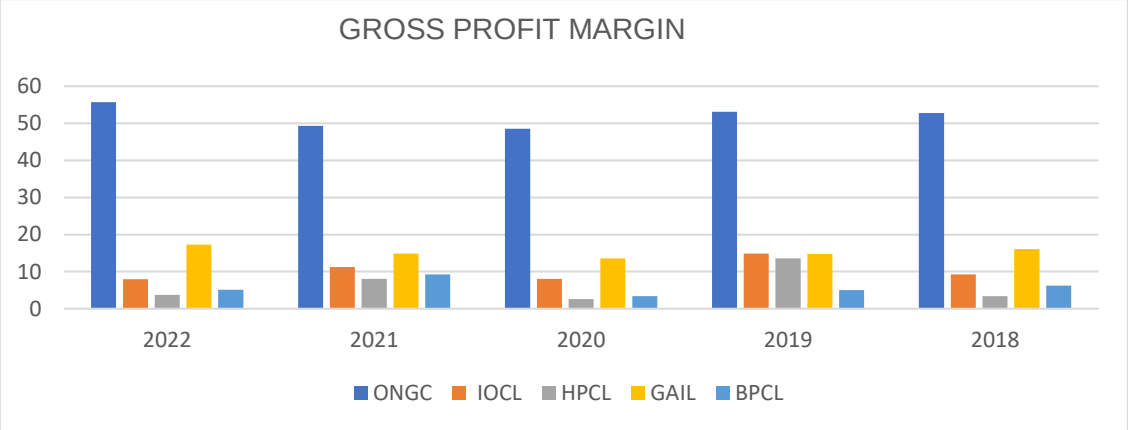

Fig. 3: Gross Profit Margin of selected companies

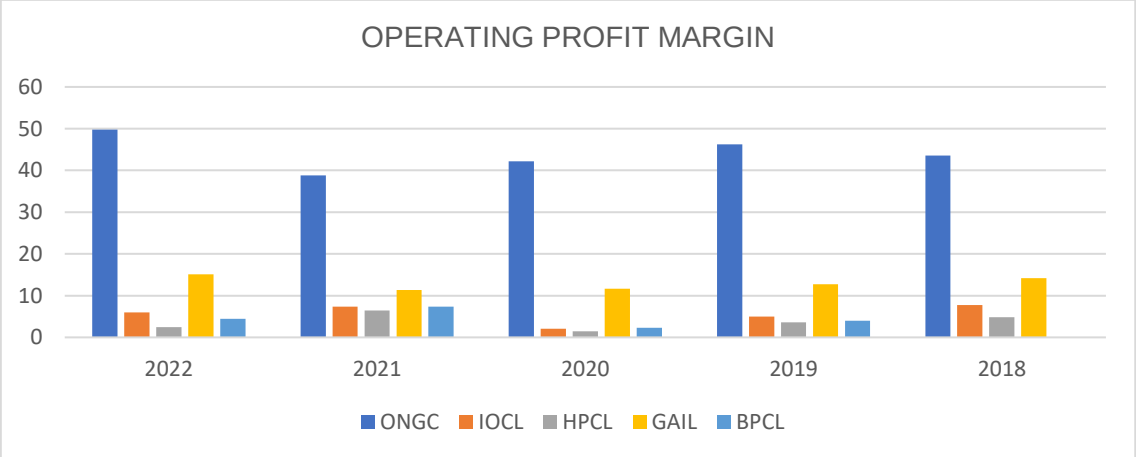

Fig. 4: Operating Profit Margin of selected companies

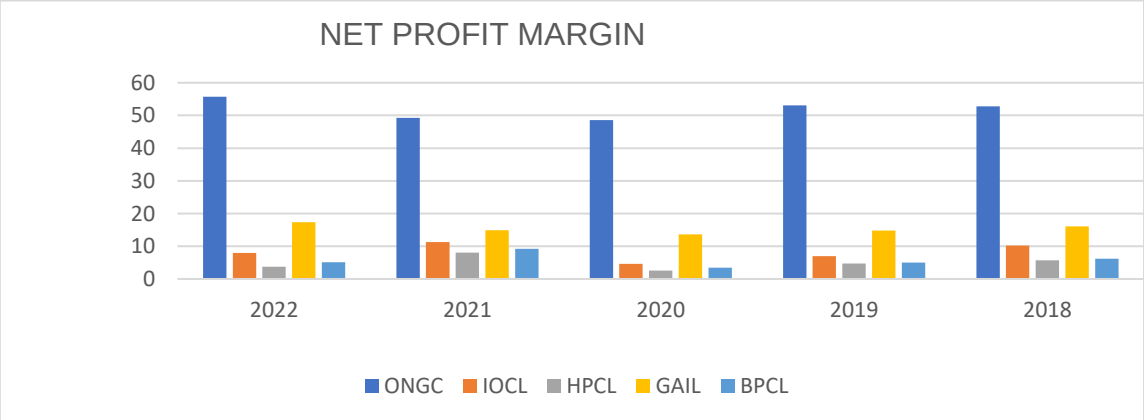

Fig. 5: Net Profit Margin of selected companies

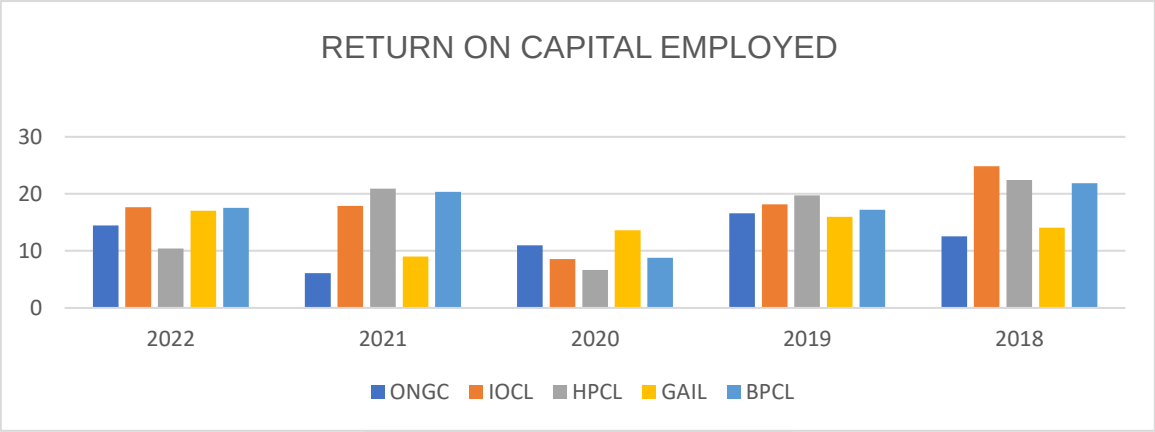

Fig. 6: Return on capital employed of selected companies

Interpretation: The gross profit margin, operating profit margin and net profit margin of ONGC is the highest among all the other Maharatna Companies and the year 2022 has experienced the highest of all these ratios whereas the graph of return on capital employed shows a mixed trends over the past five years.

5.4 Activity Ratio: Activity ratios are used to assess how well a company manages and makes use of its assets. Because they show how quickly assets are transformed into sales, these ratios are also known as turnover ratios. Any form of financial indicator that aids investors and research analysts in determining how effectively a firm uses its assets to create sales and cash is referred to as an activity ratio.

Table: 7 Asset Turnover Ratio

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	0.34	21.38	32.41	36.26	29.17
2.	IOCL	1.66	113.17	156.11	167.14	151.04
3.	HPCL	2.46	173.85	230.17	256.63	8.04
4.	GAIL	1.09	0.77	1.05	111.37	88.85
5.	BPCL	2.49	165.38	224.86	257.09	236.11

Source: Secondary Data

Table: 8 Inventory Turnover Ratio

S.No	Company Name	2022	2021	2020	2019	2018
1.	ONGC	0.40	8.03	11.23	14.14	12.70
2.	IOCL	3.25	4.84	7.63	7.38	6.49
3.	HPCL	2.17	8.11	13.92	13.48	11.79
4.	GAIL	3.37	1.35	1.62	30.44	28.20
5.	BPCL	4.4	8.69	13.93	13.80	11.33

Source: Secondary data

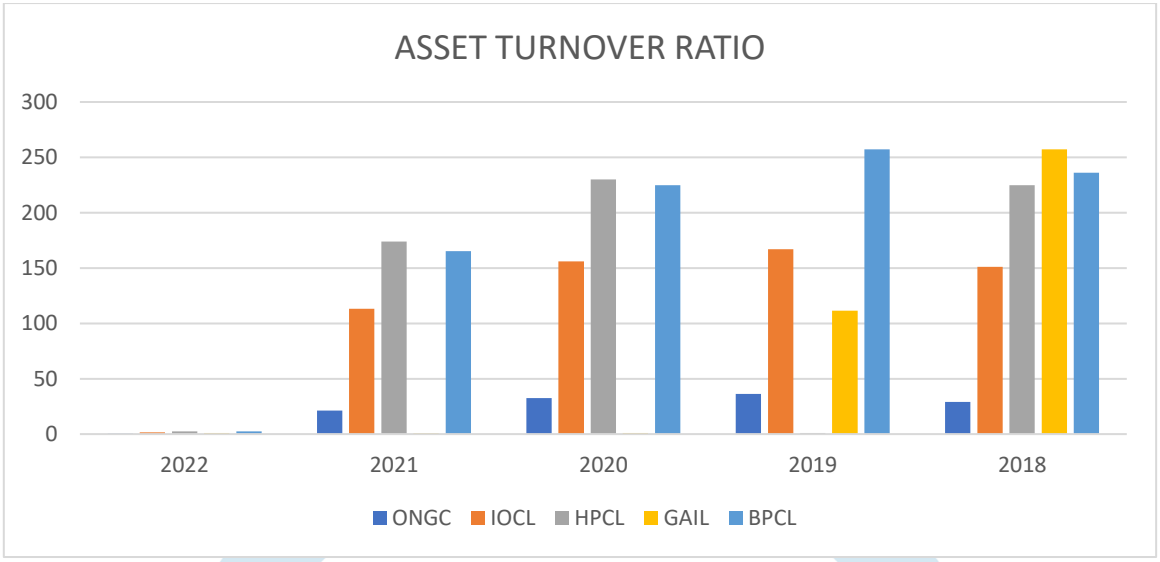

Fig. 7: Asset Turnover Ratio of selected companies

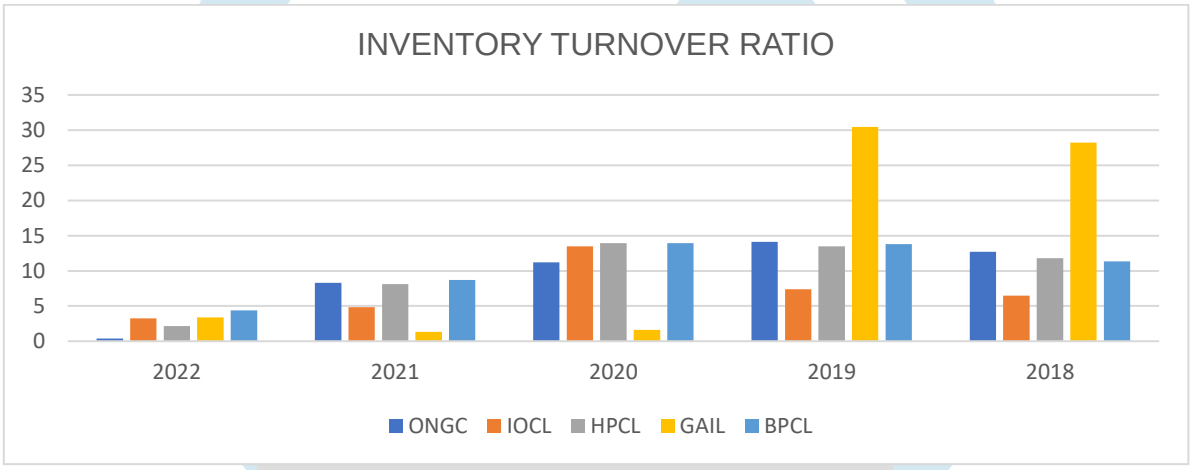

Fig. 8: Inventory Turnover Ratio of selected companies

Interpretation: HPCL and BPCL has shown a good trend in the year 2019,2020 and 2021.The asset turnover ratio shows a declining trend where the year 2022 has experienced a low asset turnover ratio. On the other hand the inventory turnover ratio shows a increasing trend initially and again showed a declining trend.

Conclusion:

Investors can learn information about a company's general health from its financial performance. It provides a quick picture of the country's economic situation and managerial performance. Before making any investments in a company, it is crucial for investors to evaluate its financial performance. The overall finding of the study suggest that GAIL is a strong performer in terms of liquidity ratio, HPCL has been a good performer in leverage ratio. ONGC is a good performer in terms of profitability ratio whereas activity ratio has shown a mixed trends over the years.

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