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AN ANALYSIS OF FINANCIAL PERFORMANCE OF OIL AND NATURAL GAS CORPORATION (ONGC)

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Abstract

Financial performance analysis is vital for an enterprise to know its strengths and weaknesses. The present study is conducted on the basis of secondary data obtained from the official website of ONGC. The research is concerned about the financial performance of the ONGC. The analysis is done by using ratio analysis and multiple regression analysis which are the most powerful tools to analyze the financial performance of a company. The researcher has taken the data of ten years from 2012-13 to 2021-22 for the study. Various ratios like current ratio, quick ratio, assets turnover ratio, debt equity ratio and return on capital employed have been used for the analysis of financial performance of the ONGC. Also, the researcher has used multiple regression analysis on SPSS. The analysis showed that there is no significant impact of CR, QR, DER, ICR, ATR, DTR on return on capital employed (ROCE). All the hypotheses have been accepted.

Keywords: Financial Performance, Ratio Analysis, Multiple Regression Analysis, Debt Equity Ratio, Assets Turnover Ratio, Return on Capital Employed.

Introduction

Financial analysis is an information processing system that can be used to give suitable information for taking any decision. There are various performance indicators that are used to analyse the financial statements and depict the financial position of any enterprise. The difference between the values of these indicators and the predetermined standards reflects the financial position and its future prospects with respect to solvency and profitability in the long-run. There are various techniques available that can be adopted for analysis of financial position of a company like ratio analysis, comparative statement analysis, common size statement analysis, cash flow statements, fund flow statements, etc. These techniques have been proved very beneficial to the stakeholders and investors to identify the financial strength of a company.

Ratio analysis is a very powerful tool to know and understand the financial health of a company. A single ratio or a separate ratio would not give the deep idea of the whole financial picture of the company. Therefore, the author used the Multiple Regression Analysis to analyze the financial performance of the ONGC, India’s largest oil exploration and Production Company during the period of 2015-16 to 2021-22.

Company Profile

Oil and natural gas industry is the most dynamic sector that incorporates changes rapidly. Energy is the basic need that pushes the growth of the economy. In order to achieve independence in energy sector, ONGC was established in 1956 as a commission. ONGC has travelled a long way to turn the great Indian dream into reality. ONGC was titled “Navratna” in 1994 and retitled “Maharatna” in 2010. ONGC has recently deployed its Energy Strategy-2040, a road map for future growth. The target of this strategy is to achieve 3 times revenue distributed, 4 times of current profit after tax (PAT) and 5-6 times of current capitalization. With this target and speed, the company is strengthening its position in the entire energy sector. The company is focusing on its oil and gas production capabilities. Another aim of the company is to achieve a greener planet by exploring newer avenues. It is trying to evolve into a complete energy solution provider.

ONGC Represents India's Energy Security Through its Pioneering Efforts.
ONGC, a Maharatna company, is the largest crude oil and natural gas Company in India which contributes around 71 per cent to Indian domestic production. Crude oil is the raw material used by downstream companies like IOC, BPCL, HPCL and MRPL to produce petroleum products like Petrol, Diesel, Kerosene, Naphtha, and Cooking Gas LPG.

The major subsidiaries of ONGC are:

1. ONGC Videsh Limited (Miniratna)
2. Mangalore Refinery and Petrochemicals Limited (Miniratna)
3. Hindustan Petroleum Corporation Limited (Maharatna)
4. Petronet
5. Mangalore Special Economic Zone Limited

Literature Review
According to **Drake (2010)**, financial statement analysis is the interpretation of financial data; by establish relationship between financial data to assist in investment and financial decision-making.

According to **Pandey (2010)** ratio analysis is a powerful tool of financial analysis. A ratio is used for evaluating the financial position and performance of a firm by establish proper relationship between the items of the balance sheet and the profit and loss account to identifying financial strengths and weaknesses of the companies.

Sheela (2011), a researcher, has analysed the financial performance of Wheels India Limited by using various financial tools like ratio analysis, comparative balance sheet, DuPont analysis and she also used some statistical tools like trend analysis and correlation. The main offering of her study is the use of five power analysis methodology to recoup ratios that are commonly used to analyze the financial position to overcome the problem of sample size and distribution uncertainty.

Roy M. & Sabah N. (2014), in their study, analysed the financial performance of Oil and Natural Gas Corporation through ratio analysis, basically those that are related to financial statement. They found out the position of ONGC in the market and its strengths and weaknesses during the period of 2010-2013.

Singh (2012), assessed working capital ratio, sales to total asset ratio, cash conversion cycle and also put in Karl Pearson's coefficient of correlation and regression analysis that were based on observations. He drew the inference that working capital turnover ratio, sales to asset ration and return on capital employed has significantly positive relationship with profitability of both IT and Telecom Industry in India. He also noticed that Telecom industry is operating below average concerning working capital management.

Chandrakumar Mangalam (2010), analysed the impact of financial leverage, operating leverage and combined leverage on Earning Per Share (EPS) of the Indian Companies. He came to an end that there is a significant relationship between degree of operating leverage, degree of financial leverage and combined leverage. He also stated that there is significantly positive relationship between degree of financial leverage and Earning Per Share (EPS).

Tiwari and Parray (2012), described in detail the analysis of financial statements of Ranbaxy Limited. They furnished understanding of the two mostly used financial tools, i.e., ratio analysis and common size statements analysis. The aim of this study was to make the readers aware of the use of these tools to analyze the financial position of a company. The income statements and balance sheet of Ranbaxy Limited was used to manifest the process of financial analysis.

Objectives of the Study

This research paper aims to analyze the financial performance and financial health of Oil and Natural Gas Corporation (ONGC) during the period of 2012-13 to 2021-22.

The study has the following objectives:

- To know the financial performance of the ONGC.
- To analyze the overall financial performance of ONGC by using ratio analysis and multiple regression analysis.
- To study the impact of various ratios on the return on capital employed.
- To depict the relationship between return on capital employed and different ratios.

Hypotheses of the Study

In order to measure the impact of Liquidity, Solvency and Efficiency on Return on Investment of the Oil and Natural Gas Corporation, the following hypotheses have been formulated:

Ho1: There is no significant impact of CR on ROCE.

Ho2: There is no significant impact of QR on ROCE.

Ho3: There is no significant impact of DER on ROCE.

Ho4: There is no significant impact of ICR on ROCE.

Ho5: There is no significant impact of ATR on ROCE.

Ho6: There is no significant impact of DTR on ROCE.

Limitations of the study

- The current study is based on secondary data obtained from the official website.
- In this study all the aspects of financial performance are not taken into account.
- The data has been arranged as per the requirements.
- The present study covers the period of ten years only.
- This study gives the insight of ONGC only.
- In this study, researcher does not compare the financial analysis of ONGC with other firm of the petroleum industry.

Research Methodology

Data Collection: The data for the study were obtained from audited annual financial statements of Oil and Natural Gas Corporation (ONGC) Company's website for the period of ten years from 2012-13 to 2021-22.

Tools Employed: Ratio analysis and Multiple Regression analysis are used to study the financial performance of ONGC.

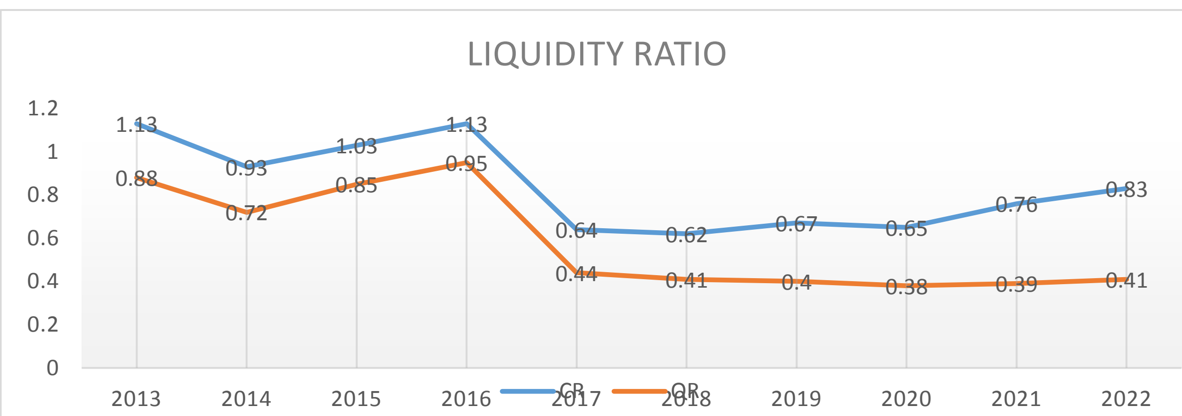
Following table shows the various financial ratios of ONGC:

TABLE -1 Financial Ratio of ONGC

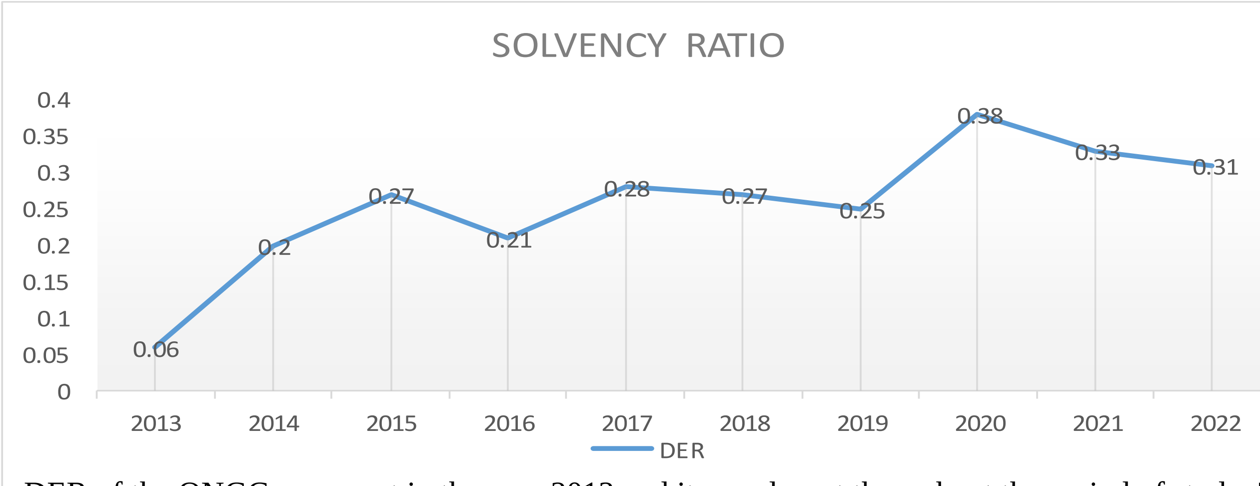
RATIOS	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CR	1.13	0.93	1.03	1.13	0.64	0.62	0.67	0.65	0.76	0.83
QR	0.88	0.72	0.85	0.95	0.44	0.41	0.4	0.38	0.39	0.41
ROCE	31.18	27.35	16.63	12.48	24.71	21.63	28.58	12.42	16.12	24.52
DER	0.06	0.2	0.27	0.21	0.28	0.27	0.25	0.38	0.33	0.31
ICR	76.95	64.13	10.56	6.33	11.83	7.98	9.01	3.24	5.71	8.52
ATR	0.56	0.49	0.45	0.33	0.58	0.64	0.78	0.78	0.56	0.84
DTR	24	33	38	34	13	15	13	12	15	14

Source: ***https://ongcindia.com/web/eng/investors/annual-reports***

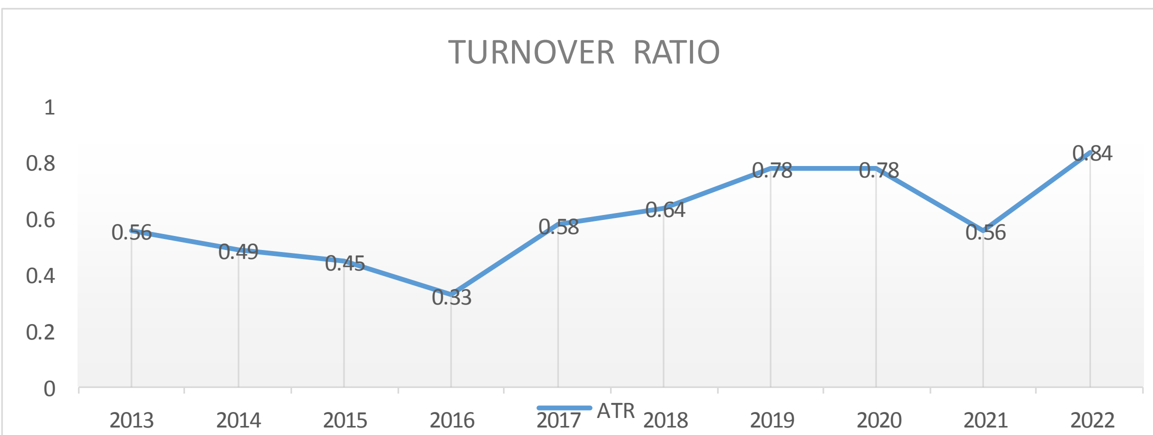
Analysis And Interpretation



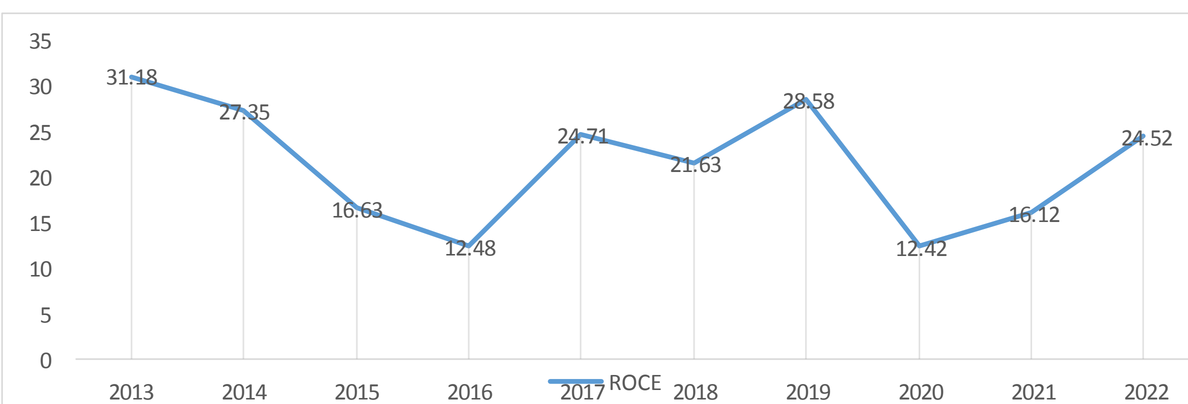
The analysis reflected that current ratio and quick ratio of the company falls below the ideal ratio. The ideal current ratio should be 2:1 and ideal quick ratio should be 1:1. As we can see clearly from the above chart that the current ratio of the company was average up to year 2016 but thereafter it decreased and was moving around the base line. The quick ratio was almost on the edge of the ideal up to year 2016 but after that it also started declining. It was lowest in the year 2019 i.e., 0.40. The ONGC faced a rapid decline in its liquidity in year 2017.



The DER of the ONGC was great in the year 2013 and it was decent throughout the period of study. The DER kept increasing until the last year of the study but it was fine. It was highest in the year 2020. While considering the other ratio of solvency i.e., ICR, it was fantastic in the year 2013 and 2014, thereafter it declined drastically up to the period of research.



The ATR was very low throughout the entire study period which means the assets of the company have not been properly utilised. It was lowest in the year 2016 and highest in the year 2022.



The ROCE of the ONGC was very fluctuating during the period of the study. It was highest in the year 2013 i.e., 31.18. The ROCE was low in the year 2015, 2016, 2020 and 2021.

Hypotheses Testing

Table: Multiple Regression Analysis: Model Summary and Coefficient Table

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.949[a]	.902	.705	3.68568

Coefficient Table						
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Hypothesis**
	B	**Std. Error**	**Beta**			
ROCE(Constant)	53.420	19.339		2.762	.070	
CR	-1.767	20.312	-.053	-.087	.936	**Supported**
QR	-42.519	30.314	-1.485	-1.403	.255	**Supported**
DER	-111.154	40.141	-1.429	-2.769	.070	**Supported**
ICR	.009	.092	.037	.103	.924	**Supported**
ATR	17.160	14.826	.409	1.157	.331	**Supported**
DTR	.586	.388	.883	1.508	.229	**Supported**

Notes-

Independent Variable: DTR, ICR, ATR, DER, CR, QR

Dependent Variable: ROCE

Results

Effect of Multiple Ratios on Return of Capital Employed

In measuring the effect of multiple ratios i.e. impact of CR, QR, DER, ICR, ATR, DTR on return on capital employed (ROCE), it was found from model summary that the correlation coefficient between all the predictors and outcome variable explaining the strength of association by 94.9% (R = 0.949), followed by coefficient of determination which showed 90.2% variance (R^2 = 0.902), which means the proportion of variance on ROCE is reflected by the predictors (multiple ratios) and moreover the Adjusted coefficient of determination is explaining the variance by 70.5% (Adjusted R^2 = 0.705) respectively, which indicates the modified explanatory power of CR, QR, DER, ICR, ATR, DTR on

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Return on capital employed (ROCE) is 70.5%. Further, in measuring the individual effect of the independent variables CR, QR, DER, ICR, ATR, DTR on return on capital employed (ROCE) was found statistically insignificant with p value > 0.05. Therefore, all hypotheses (Ho1, Ho2, Ho3, Ho4, Ho5, and Ho6) were supported by the available data. Hence, all the null hypotheses were accepted as shown in coefficient table.

Abbreviations Used

CR= Current Ratio
QR= Quick Ratio
DER= Debt Equity Ratio
ICR= Interest Coverage Ratio
ATR= Assets Turnover Ratio
DTR= Debtors Turnover Ratio
ROCE= Return on Capital Employed

Conclusion and Suggestions

The present study shows that ONGC came into existence with the aim of being a solution provider to every energy sector problem. It is the biggest oil production and exploration company in India. However, the analysis of its financial performance shows that company's ability to pay its short-term debts (liquidity) is not satisfactory and ability to pay its long-term debts (solvency) is satisfactory with respect to DER but not good with respect to ICR. It means the company is not generating enough revenue to meet its interest costs. Also, the company is not utilizing its assets properly. With considering the above conclusion, the company should pay attention towards its liquidity position. The company should utilize its assets appropriately and also it should focus on its operating efficiency.

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