

# A Research Study with Special Reference to Selected Oil Companies in India on Liquidity Analysis an Important Feature for Company's Financial Performance

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## ARTICLE DETAILS

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## ABSTRACT

The Ratio Analysis method is a method used to calculate the financial performance of companies. In Ratio Analysis method, the liquidity ratios are a very important aspect to be focused for understanding the financial position of the company and also for the smooth and continuous operation of the company. It helps us in determining the cash position for the smooth and efficient running of business and stability of the firms. Liquidity Ratios are further classified as Current Ratio, Quick Ratio also popularly known as Acid-Test Ratio, and absolute liquid ratio also known as Cash Ratio. The present research study is on liquidity analysis for the selected oil companies in India.

## 1. Introduction About the Oil Industry in India

The Indian Oil Industry is with the market size of around 259.63 million metric tonnes which makes India stands at the second position for the largest refinery in India. There are many large oil and gas companies private and public in our nation India. Our nation stands at the 3<sup>rd</sup> position around the world for consumption of oil. At the end of the year 2018, India reports around 4.5 thousand million barrels of reserves of oil and with the production of around 39.5 million tons for the year 2018.

## 2. Liquidity Analysis and It's Importance

In Ratio Analysis method, the liquidity ratios are a very important aspect to be focused for understanding the financial position of the company and also for the smooth and continuous operation of the company. It helps us in determining the cash position for the smooth and efficient running of business and stability of the firms. Liquidity Ratios are further classified as under:

1. Current Ratio
2. Quick Ratio/ Acid-Test Ratio
3. Absolute Liquid Ratio/ Cash Ratio

## 3. Review of literature

**Bhabatosh Banerjee (1982)** has studied for the year 1971-78 the medium and large public Ltd. companies in the corporate sector in their research study entitled 'Corporate Liquidity and Profitability in India' analysed the trend of liquidity position of those companies and has identified and analysed the relationship of liquidity with their profitability.

**Reddy and Patkar (2004)** the authors in their research study entitled as 'Working Capital and Liquidity Management in factory A Comparative study of SBI and CanBank factors' analysed the various determinants of the term profitability and liquidity and also to understand the size and the components too. Their research study was in a conclusion of the two important components are the sundry debtors and the sundry creditors of the current assets and liabilities of the companies in determining the size of working capital.

## 4. Objective of the study

The present research paper focuses on the below mentioned objectives:

- One of the objectives of the study is to know and understand the oil industries in India and the Liquidity ratios.
- For the selected Oil Companies in India, to analyse the liquidity ratios.
- On the basis of the derived results to draw a conclusion.

## 5. Research Methodology

The term research methodology is a very important concept for the research study and is a word divided in two parts research and methodology which states about the way in which the research study has been carried out. The whole study depends upon the methodology and thus the research methodology is the systematic and scientific method to clarify the research problem. For this present research paper, the researcher has made an attempt for the selected Oil Companies in India to analyse with the special reference the liquidity analysis position. The Universe of the study comprises the leading oil companies in India. The five Oil companies selected for the present research paper study are as follows:

1. Gujarat Natural Resources Limited
2. Deep Industries Limited
3. Asian Oilfield Services Limited
4. Selan Exploration Technology Limited
5. Jindal Drilling and Industries Limited

## 6. Sources of data

The undertaken research study is purely on the method of secondary research study. To calculate various financial ratios the annual reports used are downloaded from the official company and stock exchanges websites. For this research study the data used in is collected through various websites, journals, papers and books etc.

**7. Time Period**

The study is on the time span of around 10 years commencing from 2009-10 to the year 2018-2019.

**8. Hypothesis**

The hypothesis for the present research study will depend on the following as below mentioned.

**Null Hypothesis**

1. There's no significant difference for the selected oil companies of India between the current ratios.
2. There's no significant difference for the selected oil companies of India between the quick ratios.
3. There's no significant difference for the selected oil companies of India between the Absolute Liquid Ratios.

**Alternative Hypothesis**

1. There's significant difference for the selected oil companies of India between the current ratios.
2. There's significant difference for the selected oil companies of India between the quick ratios.

3. There's significant difference for the selected oil companies of India between the Absolute Liquid Ratios.

**9. Tools and Techniques**

The liquidity analysis ratio analysis with special reference to selected Oil Companies in India is undertaken for the present research study. Ratio analysis method as a financial tool and ANOVA as statistical tool have been used for this present research study.

**10. Data Analysis and Interpretation**

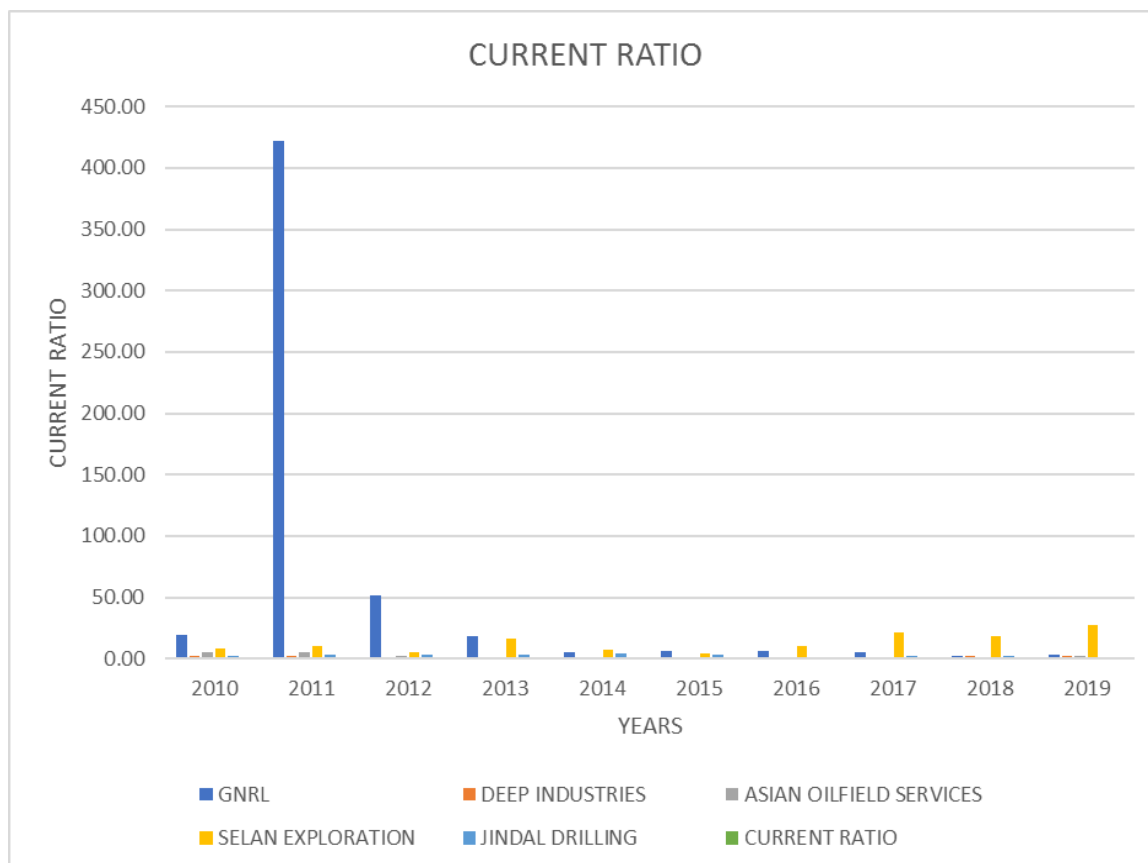
**1. Current Ratio**

The Current Ratio classified under the basis of the Liquidity Ratio Analysis is an important ratio for the company to access the ability of the company's to make payment for its short-term obligations or those due within a time period of one year. To calculate current ratio the formula mentioned below is as under:

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

CURRENT RATIO										
COMPANY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GNRL	19.75	421.81	51.72	18.69	5.46	6.52	5.86	5.15	2.47	3.64
DEEP INDUSTRIES	1.89	2.41	1.34	1.27	1.17	0.98	0.92	1.13	1.83	2.07
ASIAN OILFIELD SERVICES	5.08	4.87	2.65	1.77	1.68	1.59	0.61	1.44	1.66	2.26
SELAN EXPLORATION	8.72	9.88	5.44	16.73	7.35	4.58	10.79	20.93	17.99	27.15
JINDAL DRILLING	1.99	2.91	3.46	2.80	4.15	2.87	1.05	2.64	2.35	1.34

Table 1.1 Current Ratio



Graph 1.1 Current Ratio

### Interpretation

From the above table and graph no. 1.1, it can be concluded that GNRL with 54.11 average Current Ratio value stands at the first number position followed by the next

company Selan Exploration with the 12.96 average current ratio value, whereas the Deep Industries with 1.50 average Current Ratio value stand at last position amongst all oil companies in India taken under for the present study.

### Anova Testing

#### The Current Ratio Descriptive Statistics of different selected oil companies in India

##### SUMMARY

Groups	Count	Sum	Average	Variance
GNRL	10	541.07	54.11	16912.88
DEEP INDUSTRIES	10	15.01	1.50	0.26
ASIAN OILFIELD SERVICES	10	23.60	2.36	2.18
SELAN EXPLORATION	10	129.57	12.96	54.98
JINDAL DRILLING	10	25.56	2.56	0.86

##### ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	20299.08	4	5074.77	1.495117	0.21965	2.578739
Within Groups	152740.4	45	3394.23			
Total	173039.4	49				

### Interpretation

Ho = Between the five selected oil companies in India there's no significant difference in Current Ratio.

H1 = Between the five selected oil companies in India there's significant difference in Current Ratio.

From the above mentioned table for the 4 and 45 degree of freedom.

The F calculated value is 1.495117 and the F table value is 2.578739.

Thus, the F calculated value is less than the F table value and the value of p is more than the specified value of alpha i.e.  $\alpha$  of 0.05.

Therefore, there is acceptance of Null Hypothesis and it is in conclusion between the five selected oil companies of India

for the present research study that the difference is not seen in Current Ratio.

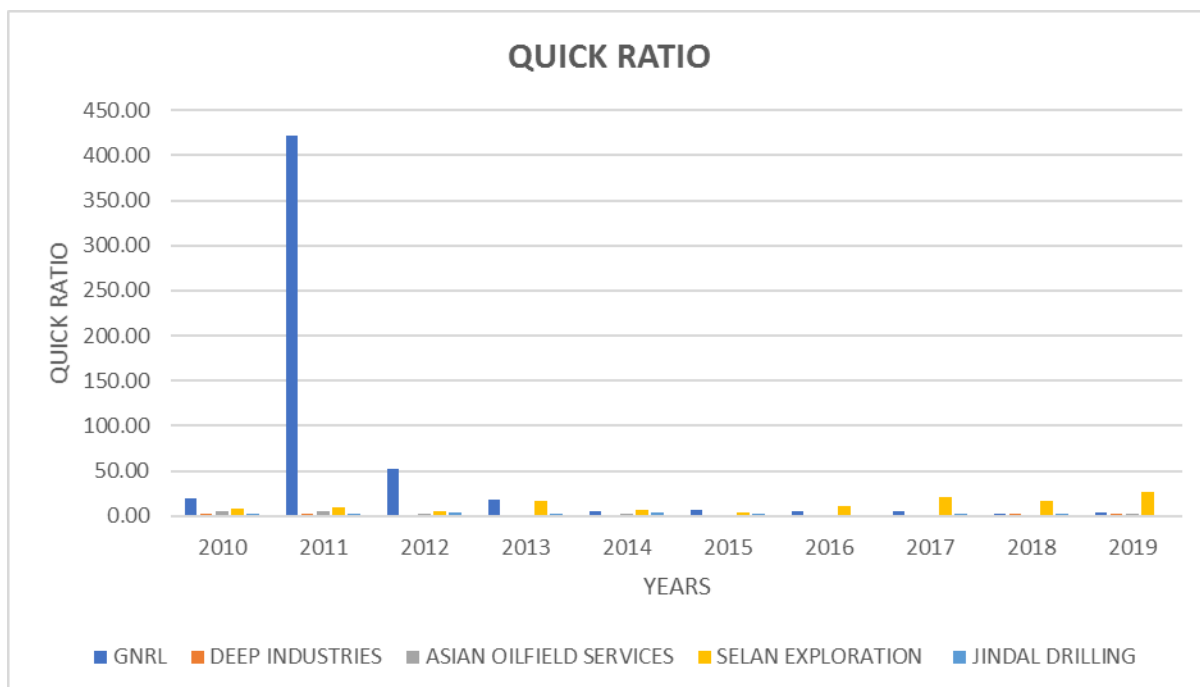
### 2. The Quick Ratio Also Known as Acid Test Ratio

The Quick Ratio also popularly known as the Acid test Ratio is classified under the head of Liquidity Ratio which is used to analyse short-term liquidity of the company and the ability to make the payment for its current liabilities with the available its most liquid Assets. The quick ratio/ Acid test ratio formula used to calculate is mentioned below as under:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories} - \text{Prepaid Expenses}}{\text{Current Liabilities}}$$

QUICK RATIO										
COMPANY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GNRL	19.66	421.81	51.72	18.69	5.46	6.52	5.86	5.15	2.47	3.64
DEEP INDUSTRIES	1.79	2.23	1.26	1.14	1.10	0.88	0.88	1.06	1.75	1.97
ASIAN OILFIELD SERVICES	5.08	4.71	2.53	1.65	2.19	1.48	0.56	1.41	1.64	2.25
SELAN EXPLORATION	7.82	9.21	5.35	16.50	7.22	4.49	10.56	20.35	17.01	25.92
JINDAL DRILLING	1.93	2.83	3.34	2.73	4.07	2.79	1.00	2.64	2.35	1.30

Table 2.1 QUICK RATIO/ ACID TEST RATIO



Graph 2.1 QUICK RATIO/ ACID TEST RATIO

**Interpretation**

From the above mentioned table and graph no. 2.1 in the study, it is in conclusion that GNRL with 54.10 average Quick Ratio value stands at the top number one position indicating highest liquid asset to meet its short-term obligations followed

by the Selan Exploration with 12.44 average quick ratio, whereas Deep Industries with 1.41 average Quick Ratio value stands at the last position amongst all oil companies taken under the present research study.

**Anova Testing**

For the different selected oil companies Descriptive Statistics of Quick Ratio

**SUMMARY**

Groups	Count	Sum	Average	Variance
GNRL	10	540.99	54.10	16913.53
DEEP INDUSTRIES	10	14.06	1.41	0.24
ASIAN OILFIELD SERVICES	10	23.50	2.35	2.10
SELAN EXPLORATION	10	124.43	12.44	50.86
JINDAL DRILLING	10	24.98	2.50	0.83

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	20353.92	4	5088.481	1.499473	0.218374	2.578739
Within Groups	152708.1	45	3393.513			
Total	173062	49				

**Interpretation**

Ho = Between the five selected oil companies in India there's no significant difference in Quick Ratio.

H1 = Between the five selected oil companies in India there's significant difference in Quick Ratio.

From the above mentioned table for the 4 and 45 degree of freedom.

The F calculated value is 1.499473 and the F table value is 2.578739.

Thus, the F calculated value is less than the F table value and the value of p is more than the specified value of alpha i.e.  $\alpha$  of 0.05.

Therefore, there is acceptance of Null Hypothesis and it is in conclusion between the five selected oil companies of India for the present research study that the difference is not seen in Quick Ratio.

**3. The Absolute Liquid Ratio/ Cash Ratio**

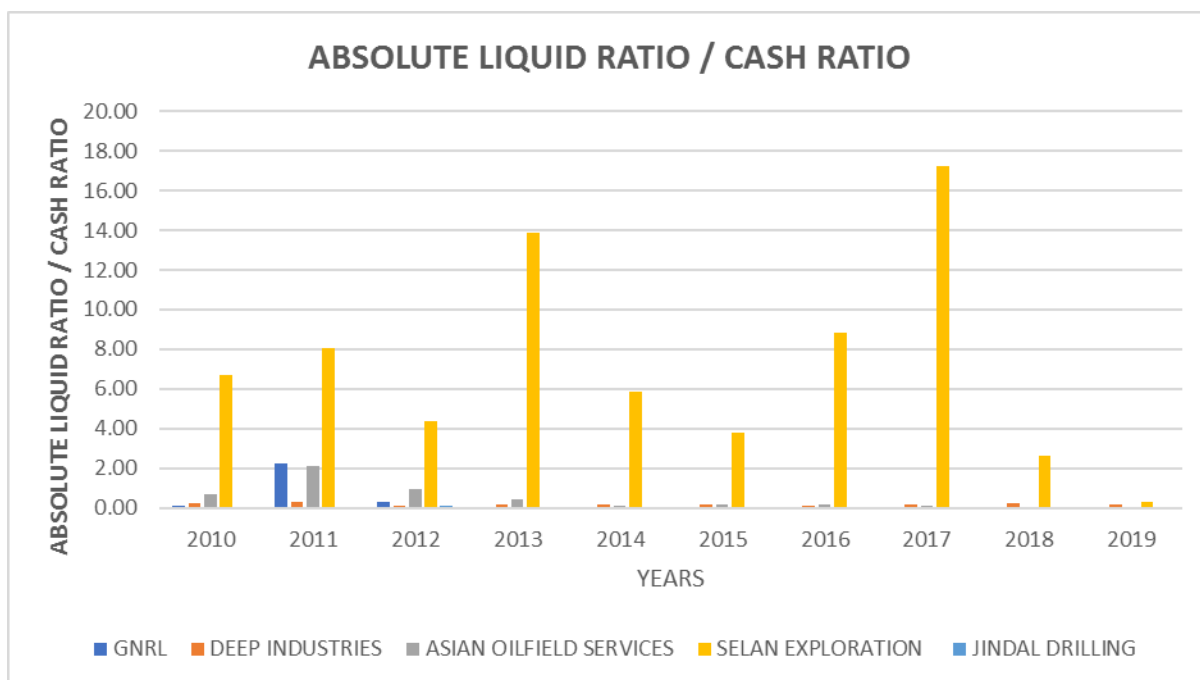
The Absolute Liquid Ratio also popularly known as the Cash Ratio classified under the head of Liquidity Ratio is a

measure to test the liquidity of the company. The formula to calculate Absolute Liquid Ratio is mentioned as under:

$$\text{Cash Ratio} = \frac{\text{Cash \& Cash equivalents}}{\text{Current Liabilities}}$$

ABSOLUTE LIQUID RATIO / CASH RATIO										
COMPANY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GNRL	0.09	2.21	0.29	0.03	0.04	0.03	0.02	0.02	0.01	0.02
DEEP INDUSTRIES	0.20	0.29	0.08	0.17	0.20	0.18	0.12	0.17	0.23	0.17
ASIAN OILFIELD SERVICES	0.71	2.14	0.97	0.40	0.11	0.20	0.15	0.13	0.03	0.06
SELAN EXPLORATION	6.69	8.03	4.37	13.88	5.85	3.79	8.81	17.27	2.62	0.28
JINDAL DRILLING	0.01	0.00	0.12	0.00	0.00	0.01	0.00	0.00	0.00	0.00

Table 3.1 ABSOLUTE LIQUID RATIO/ CASH RATIO



Graph 3.1 ABSOLUTE LIQUID RATIO/ CASH RATIO

**Interpretation**

From the above table and graph no. 3.1, it is in conclusion that Selan Exploration with 7.16 average Cash Ratio value stands at the top most position indicating highly liquid asset to meet its short-term obligations followed by the Asian Oilfield

Services Limited with average Cash ratio of 0.49 whereas Jindal Drilling with 0.01 average CASH Ratio value of stands at last position amongst all oil companies in India taken under the present research study.

**Anova Testing**

**The Cash Ratio Descriptive Statistics of different selected oil companies**

**SUMMARY**

Groups	Count	Sum	Average	Variance
GNRL	10	2.75	0.27	0.47
DEEP INDUSTRIES	10	1.8	0.18	0
ASIAN OILFIELD SERVICES	10	4.9	0.49	0.43
SELAN EXPLORATION	10	71.61	7.16	26.64
JINDAL DRILLING	10	0.15	0.01	0

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	384.3914	4	96.09784	17.44205	1.04E-08	2.578739
Within Groups	247.9297	45	5.509549			
Total	632.3211	49				

### Interpretation

Ho = Between the five selected oil companies in India there's no significant difference in Cash Ratio.

H1 = Between the five selected oil companies in India there's significant difference in Cash Ratio.

From the above mentioned table for the 4 and 45 degree of freedom.

The F calculated value is 17.44205 and the F table value is 2.578739.

Thus, the F calculated value is more than the F table value and the value of p is less than the specified value of alpha i.e.  $\alpha$  of 0.05.

Therefore, there is rejection of Null Hypothesis and it is in conclusion between the five selected oil companies of India for

the present research study that the difference is seen in Cash Ratio.

### 11. Conclusion

Through the present research study on liquidity analysis for the five selected oil companies of India we can conclude that GNRL and Selan Exploration companies have good liquidity, stability, efficiency and have better performance. The Jindal drilling, Asian Oilfield services limited and Deep Industries need to have more focus more smooth running and take adequate steps to improve their liquidity position for the smooth and continuous existence of the company and its operations to have a better market position in the competitive times.

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