



STATUS OF LIQUIDITY AND SOLVENCY POSITION OF SELECTED OIL & GAS COMPANIES IN INDIA

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ABSTRACT

The oil and gas sector plays a major role in influencing decision making for all the other important sections of the economy. This sector is most significant for the Indian economy in several ways. For the economy as a whole the Indian Oil and Gas sector is the largest contributor to Central Revenue. The objective of this paper is to examine the status of liquidity and solvency position of selected oil and gas companies in India and offer various suggestive measurements for the improvement of financial health of the selected Oil and Gas companies.

Keywords— Liquidity, Solvency, OIL and Gas companies

INTRODUCTION

A Sound Financial Management is the index of the success of an enterprise. It helps in the preparation of plans for development, expansion and their successful implementation. The overall financial performance of the company can be measured with the help of liquidity, profitability and financial health. Liquidity and Solvency are two important aspects in every business. It can be state that, the investors are keen interest to measures the financial health of the company with the help of liquidity and solvency. Both Liquidity and Solvency help the investors to know whether the company is capable of covering its financial obligations or not. These ratios are used in the credit analysis of the companies by investors, creditors, suppliers and financial institutions in order to make profitable business decision. Liquidity and solvency are both equally important for a company's financial health. Liquidity has been measured with the help of current ratio, quick ratio, debtors turnover ratio, inventory turnover ratio have been used. To measure the solvency position solvency ratio and proprietary ratio have been used. Statistical significance of this has been analysed with various statistical tools like mean, standard deviation, co-efficient of variation and compound annual growth rate. In order to find out the association between the size of the companies and various ratios of the selected Oil and Gas companies, null hypotheses have been framed and tested with F-test.

REVIEW OF LITERATURE

Meenakshi Anand¹ (2014) examined the Profitability, Liquidity and Solvency position of selected Oil and Gas Companies India. It is concluded that the performance of selected Oil and Gas companies in India was sound during the study period. **Japla.H.Panery**²(2015) made a study on liquidity of IOC, ONGC, HPCL, BPCL for the period of five years. They concluded that other selected companies have to take special steps for improvement of liquidity position. **Joseph and Daly**³ (2015) made a study on liquidity and solvency financial analysis of Oil Companies in BRIC countries. For which, the required data were collected form annual reports of the companies. They found that financial performance of China Petroleum was good during the study period.

SCOPE OF THE STUDY

The present study has been undertaken to measure the status of liquidity and solvency of the selected Oil and Gas companies in India. For which, the required secondary data have been collected for the period 15 years from CAPITALINE database. Such collected data have been analysed with the help of Liquidity and Solvency Ratios.

OBJECTIVES OF THE STUDY

1. To examine the status of Liquidity and Solvency of the selected Oil and Gas Companies in India.
2. To offer suggestions for the betterment of the performance of selected Oil and Gas Companies.

SAMPLING DESIGN

The present study is nature of descriptive study. For this, it is decided to collect the available secondary data for 15 years. Inverse of the study is 26 public sector Oil and Gas companies. Out of which, by considering the consistency of data purposively the data of 11 public sector Oil and Gas companies have been used. All such data have been collected from the CAPITALINE database (Database Learning Resource Centre, PSG Institute of Management, Coimbatore).

FRAMEWORK OF ANALYSIS

All the collected data have been analysed with the help of tools like Ratios, Standard Deviation, Compound Annual Growth Rate and F-Test. Calculations have been made by using SPSS.

CURRENT RATIO

Current ratio refers the relationship between current assets and current liabilities. It is calculated by dividing the total current assets by total of the current liabilities. The rule of thumb of current ratio is 2:1. Current assets double the current liability is considered to be satisfactory. A higher current ratio refers that a company is able to pay its debts maturing within a year. It gives information to the investors and analysts about how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

H_{01} : There is no significant difference between the current ratio and size of the of the selected Oil and Gas companies.

TABLE- 1
ASSOCIATION BETWEEN CURRENT RATIO AND THE SIZE OF THE COMPANIES: F-TEST

	SS	Df	MS	F-value	Result
Between Groups	10.841	2	5.420	23.37	Significant
Within Groups	9.740	42	0.232		
Total	20.581	44			

Table 1 reveals that the calculated value of 'F' (23.37) is greater than Table value (3.23). Hence, the framed hypothesis is not accepted and therefore, it is concluded that there is a significant difference between the current ratio and the size of the selected Oil and Gas companies.

QUICK RATIO

The quick ratio is a financial ratio used to measure a company's liquidity. The quick ratio is also known as the 'Acid Test or Liquid Ratio'. The quick ratio can be calculated by dividing the total of the quick assets by total current liabilities. The commonly acceptable quick ratio is 1:1 is considered as satisfactory⁴. Quick ratio of the selected Oil and Gas companies in India have been calculated and presented in Table 2.

H_{02} : There is no significant difference between the quick ratio and size of the selected Oil and Gas companies.

TABLE 2
QUICK RATIO AND SIZE OF COMPANIES: F-TEST

	SS	Df	MS	F-value	Result
Between Groups	5.788	2	2.894	22.31	Significant
Within Groups	5.449	42	0.130		
Total	11.236	44			

Table 2 indicates that the calculated value of 'F' (22.31) is greater than Table value. Hence, the framed hypothesis is not accepted and therefore, it is concluded that there is a significant difference between quick ratio and the size of the selected Oil and Gas companies.

DEBTORS TURNOVER RATIO

The debtors turnover ratio is an accounting tool used to quantify a company's effectiveness in collecting its receivables or money owed by customers. Debtors turnover ratio is otherwise known as receivables turnover ratio. It can be calculated by dividing

the net credit sales by average debtors. The ratio shows how well a company uses and manages the credit it extends to customers and how quickly that short-term debt is collected or is paid. The higher the value of debtor turnover the more efficient is the management of debtors/sales. Similarly, low debtors turnover implies inefficient management of debtors/sales⁵. The debtors turnover ratio has been computed for the selected Oil and Gas Companies and presented in Table 3.

H₀₃: There is no significant difference between the debtors turnover ratio and size of the of the selected Oil and Gas companies.

TABLE-3
DEBTORS TURNOVER RATIO AND SIZE OF COMPANIES AND: F-TEST

	SS	Df	MS	F-value	Result
Between Groups	22088.562	2	11044.281	1.147	Insignificant
Within Groups	404495.952	42	9630.856		
Total	426584.514	44			

Table 3 shows that the calculated value of 'F' (1.147) is less than Table value. Hence, the framed hypothesis is accepted and therefore, it is concluded that there is no significant difference between the debtors turnover ratio and size of the selected Oil and Gas companies.

AVERAGE COLLECTION PERIOD

The average collection period represents the average number of days for which a firm has to wait before its receivables are converted into cash. The ratio is calculated dividing the averages trade debtors by sales per day. The shorter the average collection period the better is the quality of debtors as a it implies quick payment by debtors. A higher collection period implies as inefficient collection performance which in turn adversely affects the liquidity of a firm out of its current liability. The debtors turnover ratio has been computed for the selected Oil and Gas Companies and presented in Table 4.

H₀₄: There is no significant difference between the average collection period and size of the selected Oil and Gas companies.

TABLE -4
AVERAGE COLLECTION PERIOD AND SIZE OF THE COMPANIES:
F-TEST

	SS	Df	MS	F-value	Result
Between Groups	0.311	2	0.156	0.007	Insignificant
Within Groups	876.267	42	20.863		
Total	876.578				

Table 4 shows that the calculated value of 'F' (0.007) is less than Table value. Hence, the framed null hypothesis is accepted. Therefore, it is concluded that there is no significant difference between the average collection period and size of the selected Oil and Gas companies.

INVENTORY TURNOVER RATIO

Inventory Turnover Ratio indicates the number of times the stock has been turned over during the period and evaluates the efficiency with which a firm is able to manage its inventory. It can be calculated by dividing the cost of goods sold by amount of average inventory at cost. It would indicate whether inventory has been efficiently used or not. A high inventory turnover indicates efficient management of inventory because, more frequently the stocks are sold the lesser amount of money is required to finance the inventory. A low inventory turnover ratio indicates an inefficient management of inventory. Table 4.9 shows the inventory turnover ratios of the selected Oil and Gas Companies.

H₀₅: There is no significant difference between the inventory turnover ratio and size of the of the selected Oil and Gas companies.

TABLE -5
INVENTORY TURNOVER RATIO AND SIZE OF THE COMPANIES:

F-TEST					
	SS	Df	MS	F-value	Result
Between Groups	2013.035	2	1006.517	24.479	Significant
Within Groups	1726.914	42	41.117		
Total	3739.949	44			

Table 5 shows that the calculated value of 'F' (24.479) is higher than Table Value. Hence, the framed null hypothesis is not accepted. Therefore, it is concluded that there is a significant difference between inventory turnover ratio and size of the selected Oil and Gas companies.

SOLVENCY RATIO

Solvency ratio indicates the relationship between the total liabilities to outsiders to total assets of a firm. It is also called as ratio of total liabilities to total assets. It measures the extent to which assets cover commitments for future payments and the liabilities. The lower ratio indicates more satisfactory or sTable is the long run solvency position of a firm.

In order to find out the association between proprietary ratio and the size of the companies the null hypothesis has been framed and the same has been tested with 'F' test and results are shown in Table 4.20.

H₀₆: There is no significant difference between the proprietary ratio and size of the selected Oil and Gas companies.

TABLE-6
SIZE OF THE COMPANIES AND SOLVENCY RATIO: F TEST

	Sum of Squares	Df	Mean Square	F	Result
Between Groups	27651.837	2	13825.918	2.469	Insignificant
Within Groups	235212.712	42	5600.303		
Total	262864.549	44			

Table 6 reveals that the calculated value of 'F' (2.469) is less than Table value. Hence, the framed null hypothesis is accepted. Therefore, it is concluded that there is no significant difference between the solvency ratio and size of the selected companies.

FINDINGS AND SUGGESTIONS

This study has been made to examine the status of liquidity and solvency position of the selected Oil and Gas companies in India. To examine this, various ratios have been calculated with available time series data. To examine the association between these ratios and size of the companies, hypotheses have been framed and the same have been tested with F-test.

CURRENT RATIO

It is found that the average Current Ratio of the small companies, medium companies and large companies is 2.45, 2.07 and 1.48 respectively. It is clearly shows that CR of small companies is the highest. Whereas, average CR of large companies is lesser than rule of thumb. The average CR of pooled companies ranges from 2.15 (2004-2005) to 1.77 (2018-2019). Further, it is clear that Standard Deviation of small, medium, large and pooled companies is 0.74, 0.30, 1.48 and 0.32 respectively.

QUICK RATIO

It is found that the average Quick Ratio of the small companies, medium companies and large companies is 1.56, 1.73 and 0.87 respectively. It is clearly shows that QR of medium companies is the highest. Whereas, average QR of large companies is lesser than rule of thumb.

DEBTORS TURNOVER RATIO

It is found that the average Debtors Turnover Ratio of the small companies, medium companies and large companies is 26.72, 18.86 and 38.82. As DTOR of large companies is higher than that of medium and small companies, it can be concluded that large companies debtors management is better than that of other two companies.

AVERAGE COLLECTION PERIOD

It is found that the Average Collection Period of the small companies, medium companies and large companies in average is 19, 19 and 12. As ACP of large companies is shorter than that of medium and small companies, it can be concluded that large companies are adopting efficient collection performance.

INVENTORY TURNOVER RATIO

It is found that the average Inventory Turnover Ratio of the small companies, medium companies and large companies is 32.18, 20.09 and 12.08. As ITR of small companies is higher than that of medium and large companies, it can be concluded that small companies inventory management is better than that of other two companies.

PROPRIETARY RATIO

It is found that the average proprietary ratio of the small companies, medium companies and large companies is 0.67, 0.78 and 0.58. It is clearly shows that proprietary of medium companies is the highest, it can be concluded that large companies are having better long term solvency position than that of other two companies.

SOLVENCY RATIO

It is found that the average solvency ratio of the small companies, medium companies and large companies is 3.84, 3.19 and 3.69. It is clearly shows that solvency ratio of medium companies is the shorter, it can be concluded that medium companies are more satisfactory in long term solvency position.

SUGGESTIONS

In the present study, while examine the status of Liquidity and solvency position of selected oil and gas companies, it is suggested that there must be necessary to take all steps to strengthen the Liquidity and solvency position.

CONCLUSION

Now-a-days this industry has become an inevitable in Indian economy. To examine the status of liquidity and solvency position of selected Oil & gas companies in India, various objectives have been framed. All such framed objectives have been examined with appropriate financial and statistical tools. On the basis of the findings of the present study, various constructive suggestions have been offered.

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