Financial Health of Public Sector Oil Marketing Companies in India-A Comparative Study

[1]MS. ARCHANA AGARWAL &[2]DR.P.SANTHI

[1]Ph.D scholar &[2]Professor

Department of Commerce,

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-641043, Tamilnadu, India.

Abstract:Financial Analysis is important to ascertain the current and future financial health of a company. For assessment of financial health of a company, its liquidity position, measurement of profitability and leverage needs to carried out. India is the third largest consumer of Petroleum in the world and the Oil sector plays a major role in influencing decision making for all other important sectors of the economy. The study aims at predicting financial soundness of select public sector companies in Oil sector in India, through comparative analysis of financial health. The Companies have been selected on the basis of line of business in which they are engaged in such as refining and marketing of oil products namely Indian Oil Corporation Limited, Hindustan Petroleum Corporation Limited, Bharat Petroleum Corporation Limited in public sector. The analysis is based on the secondary data collected from the Capitaline Database and annual reports of selected companies and website sources over a period of ten years from 2008-09 to 2017-18. The percentage, financial ratios and Altman Z score were used to analyse the data. It is observed from the study that the public sector companies IOC, HPCL, BPCL have increasing trend and also excellent financial viabilityposition during the period of study.

Key words: Financial health, Oil Marketing Companies,Financial distress,Z Score Model.

1. INTRODUCTION

Since the reserves of Oil and Natural Gases is limited in the globe and it plays a pivotal role in the economic as well as the political development of a country, all companies throughout the world are trying to best utilize the oil and Natural gas available to them by way of extraction from their own reserve and also effective import possible forthem. Oil and Natural gases are the main source of energy in the emerging world and by transferring this energy to the other form of needed energy, the country gets developed and stronger. So,India's future prosperity and position in the world will depend upon in the consumption and availability of oil and Natural gases.Oil and Natural Gas contribute 60% of the world's energy needs.The Oil and Gas sector is among the eight core Industries in India and plays a vital role in the economy.Oil imports in India rose sharply to US$87.37 in FY 2017-18 from US$70.72 billion in FY 2016-17(www.ibef.org).India is the third largest consumer of oil in the world in 2017 and second largest Oil refiner in Asia as of Sep'18(www.ibef.org)

2. LITERATURE SURVEY

Oil sector plays a very vital role in the growth of Indian Economy hence assessment of financial health is considered important. Z Score model has been highlighted as a good tool for analysis and prediction of financial health of companies in number of studies conducted from time to time.Sandesh(2016) found that Z score is a good measure to assess the likelihood of economic bankruptcy however; it does not predict when a firm will actually become bankrupt. Aditya Kumar (2016)found that present financial condition of ONGC is good but it needs to manage the financial indicators properly otherwise it may shift to bankruptcy zone. According to Kalaiselvi (2015) the Oil and Natural Gas Companies have grown and performed admirably.PathmaPriya (2016) found that select housing finance companies which arepresently in distress zone must relook at its policiesimmediately.According to Basman Omar (2016), financial health of Jordan Investment Company Limited is sound and there is no indication of failure of the company in near future. RohiniSajjan(2016) found that selected listed companies from manufacturing and non -manufacturing may become bankrupt in near future and the management should design effective strategies for better control and management of resources. Z score model has been used to predict financial viability in number of sectors like Banking (Roli Pradhan,2014), Manufacturing (MaddalaGurukamal(2018) etc. and it is proved that the it provides accurate prediction of financial distress.

3. STATEMENT OF PROBLEM

Assessment of financial health of business entities is important so that their viability in near future can be ascertained. Analysis of financial health of major oil public sector marketing companies and examination of their financial soundness to depict whether there is any possibility of getting sick in near future and to convey to the stakeholders, creditors, Government etc. regarding their continuous evaluation and monitoring the performance of the companies is important. The main emphasis of the study is to avert the possibility of financial distress and bankruptcy of the companies by continuous monitoring of their performance, to identify the causes of their deterioration in their financial performances and to take necessary action to avoid their financial sickness in near future.

4.OBJECTIVES OF THE STUDY

The study is undertaken :

- To analyse the companies in the Oil sector in terms of liquidity, profitability and solvency
- To study the leverage and working capital position of the companies and
- To predict the financial health of the select Oil companies.

5. METHODOLOGY

The public sector oil marketing companies have been selected on the basis of business in which they are engaged in. These companies are engaged in the Oil refining and marketing activities.Thecompanies selected for the study are Indian Oil Corporation Limited (IOCL),Hindustan Petroleum Corporation Limited (HPCL) and Bharat Petroleum Corporation Limited (BPCL). The analysis and projections aims at to measure the financial health of the three major Oil marketing companies from Financial Year 2008-09 to Financial Year 2017-18. The study is based on the secondary data taken from the Capitaline Database and the Annual Reports of the Oil Marketing Companies. The study is based on the secondary data on financial performance of top Public sector oil marketing companies in India. The compilation of data is done from the Annual Report for the financial Years 2009 to 2018, various websites and Capitaline Database.

The ratio analysis was used to analyse the liquidity, profitability and solvency of the companies and prediction of financial health using the model, Dr. Edward. I. Altman's Multi Discriminate Analysis which is a statistical technique used in prediction of business solvency and is represented by the discriminant function

$$Z=1.2X1 + 1.4X2 + 3.33X3 + 0.6X4 + 1.0x5 ,$$

where Z=Index of Solvency, X1 = Net Working Capital / Total Assets, X2 = Accumulated Retained Earnings/Total Assets, X3=EBIT/Total Assets, X4 =Market Value of Equity/Book Value of Equity and X5=Sales/Total Assets.

Altman's analysis shows that if,Z>= 2.99, it implies - non insolvency (Too healthy Zone), if Z is between 1.81 and 2.99, it implies - a grey area (Healthy Zone) and if Z<= 1.81, it implies - bankruptcy.

6. RESULTS AND OUTCOME

The secondary data collected were analysed and the Z score computed for each of the select companies were presented as below.

- **Financial health of IOCL:**

Based on the financials of IOCL,the Z score value was calculated and the results are shown in Table 1.

Table 1
Z Score Value of IOCL

Year	X1	X2	X3	X4	X5	Z score
2018	-0.117	0.359	0.106	1.554	1.501	3.210
2017	-0.138	0.366	0.091	1.883	1.371	3.227
2016	-0.043	0.389	0.059	1.084	1.569	2.953
2015	-0.004	0.298	0.005	1.316	2.045	3.317
2014	-0.003	0.252	0.010	1.026	1.935	2.972
2013	0.019	0.262	-0.012	1.118	1.000	2.066
2012	0.006	0.264	0.026	1.102	1.949	3.118
2011	0.008	0.305	0.041	1.467	1.784	3.296
2010	-0.065	0.329	0.086	1.425	1.735	3.316
2009	-0.129	0.328	-0.008	1.050	2.213	3.161
Mean						3.064

Source: Computed

The negligible allocation to working capital out of total assets created a strain in the liquidity of the company over the study period. With regard to retained earnings as a proportion to total assets, it is evident that the proportion is increased in the recent years. A slight improvement is noticed in EBIT as a proportion of total assets during the study period. For calculation of Z score value, the data has been analysed for 10 years, starting from the year 2009 to the year 2018.It is evident from the table (1) that the mean value of Z score is 3.064 which implies that on over all basis, the corporation is in too healthy zone. On the basis of yearly analysis the Z score revealed that the company was in too healthy zone in most of the years except in the FY 2013,2014 & 2016 when it was in healthy zone.

- **Financial health of BPCL:**

Thez score value computed for BPCL is presented in table 2

Table 2
Z Score Value of BPCL

Year	X1	X2	X3	X4	X5	Z score
2018	-0.079	0.321	0.120	2.465	2.358	4.690
2017	-0.100	0.308	0.125	2.868	2.198	4.763
2016	-0.048	0.348	0.148	2.177	2.491	4.805
2015	-0.034	0.312	0.115	2.607	3.414	5.861
2014	0.015	0.259	0.101	1.710	3.591	5.401
2013	-0.064	0.238	0.087	1.644	3.584	5.183
2012	-0.110	0.222	0.056	1.695	3.231	4.681
2011	-0.118	0.245	0.063	1.572	2.714	4.131
2010	-0.042	0.234	0.063	1.427	2.213	3.615
2009	-0.283	0.245	0.066	1.123	2.794	3.735
Mean						4.687

Source: Computed

The financial health analysis was conducted for BPCL during the study period and the results are depicted in table (2). With regard to working capital, it is noticed that the current liabilities are more than the current assets leading to such negative results. The retained earnings are high considering the total assets. On comparison of EBIT with total assets, it is noticed that the proportion of EBIT is at minimum level. The market value of shares is increased in recent past in comparison with the book value during the period of study. With regard to sales to total assets, the trend showed an increase from the FY 2012 to 2015, however it again declined subsequently. According to the computation of the Z Score Model, the mean value of Z is 4.687 which implies that BPCL is in a too healthy zone during the period of study.

- **Financial health of HPCL:**

Based on the financials of HPCL,the Z score value was calculated and the results are shown in Table 3.

Table 3
Z Score Value of HPCL

Year	X1	X2	X3	X4	X5	Z score
2018	-0.116	0.268	0.091	2.054	2.448	4.301
2017	-0.158	0.250	0.103	2.533	2.334	4.458
2016	0.013	0.235	0.073	1.596	2.558	4.166
2015	0.033	0.158	0.005	1.581	2.526	3.814
2014	0.040	0.141	-0.010	0.749	2.421	3.112
2013	-0.069	0.141	-0.017	0.723	2.342	2.861
2012	-0.085	0.149	-0.018	0.783	2.165	2.713
2011	-0.076	0.185	0.025	0.910	1.984	2.816
2010	-0.102	0.205	0.026	0.888	1.934	2.753
2009	0.029	0.217	-0.022	0.818	2.600	3.389
Mean						3.438

Source: Computed

Analysis of financial health has been carried out and the results are shown in table (3). It is observed that working capital was negative in few years indicating strain on the liquidity of the company. With regard to accumulated retained earnings as a proportion to total assets, it is noticed that the same is significantly increased in the recent past. The percentage of EBIT to total assets has been inconsistent during the period of study. Market value of the equity is increased in the recent past which is evident from the improved proportion of market value in comparison with book value. Sales to total assets ratio has been almost on constant increasing trend which depicts healthy position of the company. Thedata has been analysed for 10 years starting from FY 2009 to 2018.It is evident from the table (3) that the mean value of Z score is 3.438 which implies that on overall basis, the corporation is in too Healthy Zone except in the FY 2010 to 2013 when it was in healthy zone.

7. IMPLICATION OF THE STUDY

Though the performance of all the three Oil Marketing companies is very good, continuous evaluation and monitoring is required to ensure the further improvement of working capital ratio and further to ensure that all other ratios are not deteriorated.

8. LIMITATION OF THE STUDY

Following are the limitations of the study:

1. The study is limited to period from 2009 to 2018.
2. The study is conducted based on the secondary data taken from the Capitaline database and the Annual reports of the Companies.
3. The study is based on Dr. Altman's Multiple Discriminate Analysis Model, which is having its own limitations.

9. CONCLUSION

The financial health of the three companies is sound as the facts presented shows that all the three companies are growing very fast. Though thecompanies' performance mainly depends on the import policy and the crude prices of the OPEC countries, the assessment of financial health becomes inevitable. The financial health of the select companies is found to be good and there is every likelihood of these companies shall have good financial performance in near future.

References:

[1] Al –DalayeenBasmanOmar, Evaluating the financial health of Jordan International Investment Company Limited Using Altman's Z Score Model. InternationalJournal of Applied Science and Technology. 6(3): 116-125, 2016.
[2] Kalaiselvi.G, Financial Health Analysis of Large scale Oil and Natural Gas Companies in India-With special reference to select Oil and Natural Gas Companies,Global Journal for Research Analysis. 4(4): 1-4, 2015.
[3] Kumar Aditya, An Appraisal of Financial Solvency of ONGC a Z Score Model.Abhinav International Monthly Referred Journal of Research in Management &Technology.15(4): 1-8, 2016.
[4] MaddalaGurukamal, International Research Journal of Engineering and Technology. 5(4): 1804-1809, 2018
[5] PatmaPriya.D, Evaluation of financial health of Housing finance companies in India –A Z score Model. Intercontinental Journal of Finance Research Review. 4(10): 24-30, 2016
[6] RohiniSajjan, Predicting bankruptcy of selected firms by applying Altman's z-Score Model, International Journal of Research – Granthaalayah. 4(4): 152-158, 2016
[7] Roli Pradhan, Z Score estimation for Indian banking sector, International Journal of Trade, Economics and Finance. 5(6): 516-520, 2014
[8] Sandesh.c, The Analytical Study of Altman Z Score on NIFTY 50 Companies,IRA-International Journal of Management and Social Sciences. 3(3): 433-438, 2016.
[9] Annual Report of IOCL FY 2009-18. HPCL for FY 2009-18 and BPCL for FY 2009-18
[10] CapitalineDatabase
[11] www.moneycontrol.com
[12] www.BSE.com
[13] http://www.hindustanpetroleum.com
[14] www.iocl.com
[15] www.bharatpetroleum.com
[16] www.ibef.org