



A study on financial analysis through comparative statements - with special reference to HPCL

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Abstract

The financial performance of HPCL have been developing these days creating an interesting cause to study its financial reports and compare them with the firms in the same industry to understand the reason for financial developments in HPCL with respect to other firms performance in the oil and gas industry, India.

In this study I have depicted intra firm comparative analysis by taking five years data of HPCL Company from 2012 to 2017. Comparative balance sheet and comparative profit and loss account are prepared to analyse the firm's liquidity, profitability and solvency positions from last five years. Then I have taken another four companies which are HPCL (Hindustan Petroleum Corporation Ltd), BPCL (Bharat Petroleum Corporation Ltd), ESSAR (Essar oil ltd), GAIL (Gas Authority of India ltd) and IOC (Indian Oil Corporation) to do inter firm analysis comparing with HPCL. In this study I have compared these entities in the terms of a profitability ratio, a solvency ratio and a liquidity ratio.

Keywords: liquidity, profitability, solvency, intra firm analysis, inter firm analysis

Introduction

Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price. Market liquidity refers to the extent to which a market, such as a country's stock market or a city's real estate market, allows assets to be bought and sold at stable prices. Cash is considered the most liquid asset, while real estate, fine art and collectibles are all relatively illiquid.

Solvency is the ability of a company to meet its long-term financial obligations. Solvency is essential to staying in business as it asserts a company's ability to continue operations into the foreseeable future. While a company also needs liquidity to thrive, liquidity should not be confused with solvency. A company that is insolvent must often enter bankruptcy.

Profitability is closely related to profit, but it is the metric used to determine the scope of a company's profit in relation to the size of the business. Profitability is a measurement of efficiency and ultimately its success or failure. It is expressed as a relative, not an absolute, amount. Profitability can further be defined as the ability of a business to produce a return on an investment based on its resources in comparison with an alternative investment. Although a company realizes profit it does not mean that the company is profitable.

Thus by studying about the liquidity, solvency and profitability positions of the entity, we can understand the overall financial performance of the entity. So, by doing intra firm analysis and inter firm analysis we can understand the compared performance of the entity too.

Need and significance of the study

The oil and gas sector is one of the core industries in India and plays a major role in influencing decision making for all the other important sections of the economy. India's economic

growth is closely related to energy demand; therefore the need and importance of oil and gas is projected to grow more. HPCL is a key player in such an important industry in India. Thus there is a need to study the performance of the entity.

Objectives

The main objectives of the study are as follows:

1. To study the concept of financial analysis through studying comparative statements.
2. To study and analyse performance of HPCL through comparative statements.
3. To compare the performance of HPCL with other leading firms in oil and gas industry.
4. To offer suggestions for improving the financial performance of HPCL based on the study.

Literature Review

Article 1

A study by Philipp Bagus and David Howden, entitled 'The Federal Reserve System and Euro system's Balance Sheet Policies during the Financial Crisis: a Comparative Analysis' stated that, this article is completely about the deterioration of the balance sheet and its impact on currencies of the two countries America and Europe. Central banks of these two countries have altered their balance sheet practices as per the recent changes and turmoil in the economy. So in this article the author concentrated completely about the performance changes in the two central banks due to the economic crisis and its impact on the economy. He concluded that though American central bank is good in its performance in terms of capital, European central bank is good in its liquidity terms and safety terms. He also found that though the European central bank seems numerically good, it is not performing so well in terms of regulations and transparency.

Article 2

A study by Rohit Bansal entitled, 'A Comparative Financial Study: Evidence from Selected Indian Retail Companies' stated that Hindustan Unilever Limited (HUL) is India's largest fast moving consumer goods company with a heritage of over 80 years in India and touches the lives of two out of three Indians. Apart from HUL we have taken V2 Retail erstwhile known as Vishal Retail, Shoppers Stop, which is leading stores providing goods in fashion and cosmetics verticals and Pantaloons Fashion & Retail one of the biggest rival of Shoppers stop and V2 retail in the business. The objective of this research is to measure the financial and accounting performance of Indian leading IT companies for the period of 2009 to 2013. Financial statements and income statements of HUL, Vishal retail, Shoppers stop, and Pantaloons fashion & retail have been taken from database i.e. CMIE, Prowess, and Money Control and Yahoo Finance. Required information derived from these financial statements was summarized.

Article 3

A study by Dr. Donthi Ravinder, Muskula Anitha, entitled 'Financial Analysis – A Study' stated that this study is to know the financial performance of Bambino Agro Industries Limited, Sardhar Patel Road, Secunderabad, by using comparative statement analysis, to examine the liquidity position of the company, to study the operational performance and efficiency of the company in terms of utilization of funds and other resources, to evaluate the profitability position of the company, to know the long - term solvency position of the company, to know the short - term solvency position of the company. Through this article he had concluded that during the study period the sales were showing fluctuating trend. The operating profit of the company was increased during the study period. The current liabilities were increased during the study period. The miscellaneous expenses were fluctuated during the study period. The cash balance was fluctuated during the study period. The provisions were fluctuated during the study period.

Article 4

A study by I. Anand Pawar and M. Pandya Nayak, entitled 'FINANCIAL PERFORMANCE ANALYSIS: A CASE STUDY OF BSNL', stated that the telecom industry contributed a lot for the development of the economy. BSNL is inevitable while speaking about Indian telecom performance. Through this article the authors attempted to analyse financial performance of BSNL. They studied the data of the unit related to 9 years, which is from 2002-03 to 2010-11. Their study concluded that liquidity position of the unit is strong thereby reflecting its ability to repay its short term liabilities. They suggested that the unit should deliberately move towards new projects and successfully deliver value to them for further development of the unit.

Article 5

A study by Ratish kakkad, entitled 'Comparative Financial statement Analysis & Innovation in Private sector Pharmaceutical Companies in India-An empirical Analysis' stated that, this article is a comparison of the performances of two pharmaceutical firms which had a good brand image. Author of this article had concentrated on the performance and growth of the firms due to large scope for the growth of pharmaceutical industries in India because of huge population who are dependent on pharmacy. Author has taken the financial statements of Dr. Reddy's laboratory ltd and Lupin ltd for his study of comparison. Liquidity position of lupin ltd is threatening when compared to Dr. Reddy's. Profitability of Dr. reddy's is better than lupin's. He found that lupin has to change its strategies to lead in a positive way and as it is a pharmaceutical company government intervention is too much which is leading to delay in decision making.

Intra firm analysis

In the intra firm analysis I have compared the five years performance of the entity to understand the performance of the entity in the recent five years. Then I have interpreted on the very important aspects of the financial statement.

Comparative balance sheet of HPCL from 2012-13 to 2016-17 (Rs in crores)**Table 1**

| Particulars | 2012-2017 | | | |
|--|-------------------------|-------------------------|---------------------------------|-----------------------|
| | 2016-17 (Rs. In crores) | 2012-13 (Rs. In crores) | Absolute change (Rs. In crores) | Percentage change (%) |
| Share holders' funds | 20347.41 | 13726.4 | 6621.01 | 48.236 |
| Secured loans | 1258.75 | 1520 | -261.25 | -17.188 |
| Unsecured loans | 5019.4 | 7427.18 | -2407.78 | -32.418 |
| Deferred tax liabilities | 5895.59 | 3598.35 | 2297.24 | 63.841 |
| Other long term liabilities | 11004.94 | 6211.19 | 4793.75 | 77.179 |
| Long term provisions | 182.32 | 498.96 | -316.64 | -63.460 |
| Current liabilities | 34755.5 | 43262.65 | -8507.15 | -19.664 |
| TOTAL LIABILITIES | 78463.91 | 76244.73 | 2219.18 | 2.911 |
| Fixed assets | 36131.88 | 22548.7 | 13583.18 | 60.239 |
| Capital work in progress | 1810.48 | 5172.87 | -3362.39 | -65.000 |
| Long term advances | 1134.04 | 1761.49 | -627.45 | -35.620 |
| Other noncurrent assets | 661.85 | 176.21 | 485.64 | 275.603 |
| Noncurrent investments | 5809.85 | 8266.07 | -2456.22 | -29.714 |
| Current assets | 32915.81 | 38230.64 | -5314.83 | -13.902 |
| Miscellaneous expenses not written off | 0 | 88.75 | -88.75 | -100.000 |
| Total Assets | 78463.91 | 76244.73 | 2219.18 | 2.911 |

Interpretation

Liquidity Position

It is deemed that the liquidity position of the entity is improving with the increase in the liquid assets, but the current situation in HPCL is not so. The liquid assets have reduced to nearly 13 percent. This is actually not a good sign for the entity because if liquidity position is not strong the entity will not be in a position to meet the daily operating expenditure to the desired levels.

Solvency Position

It is deemed that the long term financial position or the solvency position of the entity will be ideal, if the entity finances the long term financial requirements through raising funds and finance the short term financial requirements through the current liabilities. This can be understood by examining the position of long term assets and long term liabilities along with short term assets and short term liabilities.

Analysis of important elements of balance sheet

Fixed Assets

Here in the case of HPCL the fixed assets have been increased to 60% which is a good sign. This indicates that the operational activities have developed to 60% in the entity within five years. The total long term liabilities have increased up to 77% and the shareholders funds have also been increased up to 48%, which depicts that the total fixed assets have been financed through these long term liabilities only. At the same time the long term loans have also been reduced, which means that interest liability have also been reduced. So we can say that the solvency position of the entity is strong and has developed extremely within these five years.

Profitability

Profitability position of an entity is assessed by examining the changes in reserves and other sources created from the profits. In the case of HPCL it is not maintaining any kind of reserves and provisions except long term provisions. These long term provisions have been reduced drastically up to 63%. It states that the profitability position of HPCL is also not so good.

Table 2

| Years | Amount (Rs. in crores) | Change in amount (Rs. in crores) | Percentage change (%) |
|---------|------------------------|----------------------------------|-----------------------|
| 2012-13 | 22548.7 | - | - |
| 2013-14 | 25912.24 | 3363.54 | 14.9 |
| 2014-15 | 29062.81 | 3150.57 | 12.1 |
| 2015-16 | 33107.57 | 4044.76 | 13.9 |
| 2016-17 | 36131.88 | 3024.31 | 9.1 |

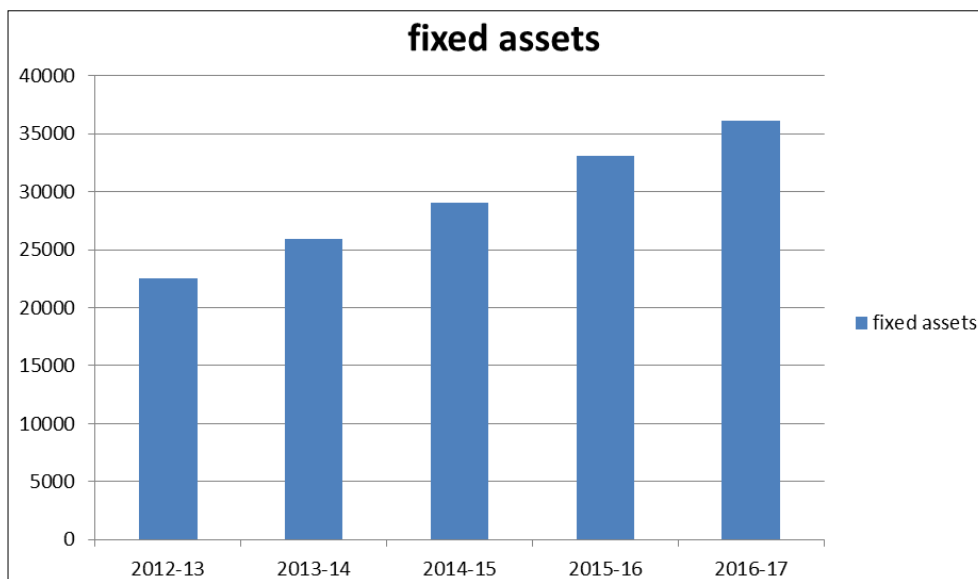


Fig 1

Interpretation

The analysis of the fixed assets of the entity will show the development in the production levels of the organisation. In the case of HPCL there is a continuous increase in the fixed

assets, it is a sign which indicates that the entity is adopting new technologies and finding room for improvements, and also that the production activities have been increasing from 2012 to 2017.

Working Capital

Table 3

| Year | Amount (Rs. in crores) | Change in amount (Rs. in crores) | Percentage change (%) |
|---------|------------------------|----------------------------------|-----------------------|
| 2012-13 | 5302.01 | - | - |
| 2013-14 | -4315.25 | -9617.26 | -181.3 |
| 2014-15 | -3898.44 | 416.81 | -9.6 |
| 2015-16 | -876.16 | 3022.28 | -77.5 |
| 2016-17 | 1839.69 | 2715.85 | -309.9 |

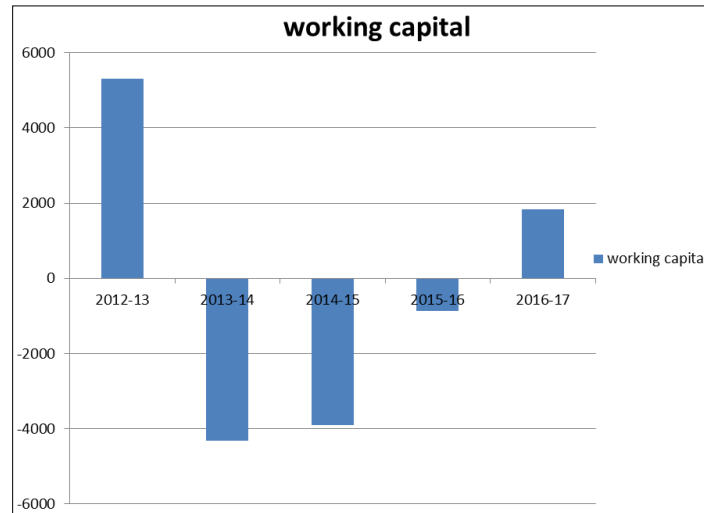


Fig 2

Interpretation

Analysis of working capital will show the improvement in the operational activities of the organisation. In the case of HPCL, the position of working capital had started being positive in

the year 2016-17. The working capital position is negative in the years 2013 to 2016 because of the reduction in current assets of the entity.

Comparative income statement of HPCL from 2012 to 2017

Table 4

| Particulars | 2012-2017 | | | |
|-------------------------------------|-------------------------|-------------------------|---------------------------------|-----------------------|
| | 2012-13 (Rs. in crores) | 2016-17 (Rs. in crores) | Absolute change (Rs. in crores) | Percentage change (%) |
| Gross sales | 217209 | 213803 | 3405.97 | 1.593 |
| Less: excise | 9146.15 | 26779.28 | -17633.13 | -65.846 |
| Net sales | 208062.8 | 187023.7 | 21039.11 | 11.249 |
| Expenditure | | | | |
| Increase/ decrease in stock | 581.91 | -4454.06 | 5035.97 | -113.065 |
| Raw material consumed | 191346.6 | 167611.2 | 23735.39 | 14.161 |
| Power and fuel | 1093.55 | 870.56 | 222.99 | 25.615 |
| Employee cost | 2525.56 | 2946.08 | -420.52 | -14.274 |
| Other manufacturing expenses | 4998.09 | 7110.09 | -2112 | -29.704 |
| General and administrative expenses | 1207.41 | 2075.77 | -868.36 | -41.833 |
| Selling and distribution expenses | 1432.5 | 156.79 | 1275.71 | 813.642 |
| Miscellaneous expenses | 1404.43 | 130.27 | 1274.16 | 978.092 |
| Expenses capitalised | 0 | 0 | 0 | 0.000 |
| Total Expenditure | 204590 | 179446.7 | 25143.34 | 14.012 |
| PBIDT | 3472.81 | 10577.05 | -7104.24 | -67.167 |
| Other income | 1398.07 | 1514.72 | -116.65 | -7.701 |
| Operating profit | 4870.88 | 12091.77 | -7220.89 | -59.717 |
| Interest | 1412.8 | 535.65 | 877.15 | 163.754 |
| PBDT | 3458.08 | 11556.12 | -8098.04 | -70.076 |
| Depreciation | 1983.52 | 2535.28 | -551.76 | -21.763 |
| PBT | 1474.56 | 9020.84 | -7546.28 | -83.654 |
| Provision for tax | 564.85 | 2812.04 | -2247.19 | -79.913 |
| Pat | 904.71 | 6208.8 | -5304.09 | -85.429 |

Interpretation

When change in sales is compared with change in cost of goods sold we can understand the profitability position of the entity through profit and loss account. In the year 2016-17 net sales amount is Rs. 1, 87,023.70 and cost of goods sold is Rs. 1, 67,611.16 and in the year 2012-13 the sales amount Rs. 2, 08,062.81 and cost of goods sold is Rs. 1, 91,346.55. The change in the sales amount is around -10% where as the change in the cost of goods sold is around -12%. Though the amount of sales reduced from years the change in the sales amount has been increasing with a percentage higher than increase in cost of goods sold. Hence we can say that the profitability position has improved from years, but it is not good enough for a developing entity. As it is a temporary phenomenon, the event is anticipated to develop further in the coming years.

PAT

Table 5

| Years | Amount (Rs. in crores) | Change in amount (Rs. in crores) | Percentage change (%) |
|---------|------------------------|----------------------------------|-----------------------|
| 2012-13 | 904.71 | - | - |
| 2013-14 | 1733.77 | 829.06 | 91.6 |
| 2014-15 | 2733.26 | 999.49 | 57.6 |
| 2015-16 | 3726.16 | 992.9 | 36.3 |
| 2016-17 | 6208.8 | 2482.64 | 66.6 |

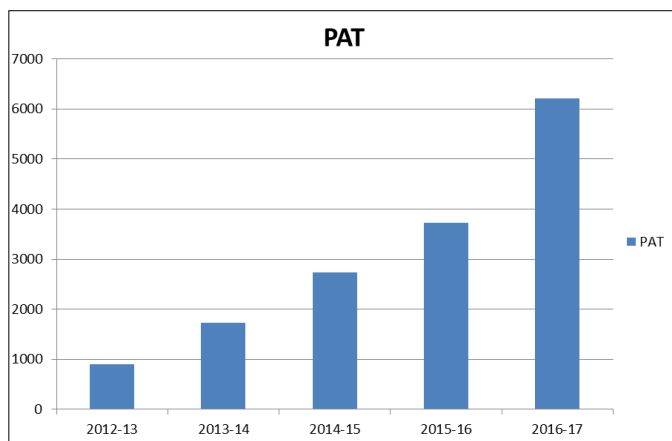


Fig 3

Interpretation

PAT is nothing but Profit After Tax. The analysis of PAT will depict the changes in the performance of the entity in terms of net profit. Though the gross profit showed increasing trend from 2014, the net profit have an increasing trend from 2012 onwards. The net profit is increasing every year in the entity. It shows that there is a good control over the non- operating expenses in the entity.

Inter firm analysis

Through inter firm analysis, data are collected from participating organization or firm by their trade organization or centre of inter-firm comparison. Inter firm analysis is

conducted through following process:

- (a) Data are collected from participating organization or firm by their trade organization or centre of inter-firm comparison.
- (b) The management of an organisation is provided with information which will allow them to determine the efficiency being achieved, measured by comparing the performances of other business.
- (c) An attempt is made to show why results vary from one business to another by providing performance gains which represents the points gained for performance of the entity. Highest performing company attains 5 and reduces till 1. These are added and then average is calculated. Basing on the average points attained by the entity, ranks are provided.

Liquidity ratio (current ratio)

The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company's current total liabilities.

Table 6

| Particulars | Ratio | Performance gains |
|-------------|-------|-------------------|
| HPCL | 0.94 | 4 |
| BPCL | 0.78 | 1 |
| Essar | 0.81 | 2 |
| GAIL | 1.00 | 5 |
| IOC | 0.85 | 3 |

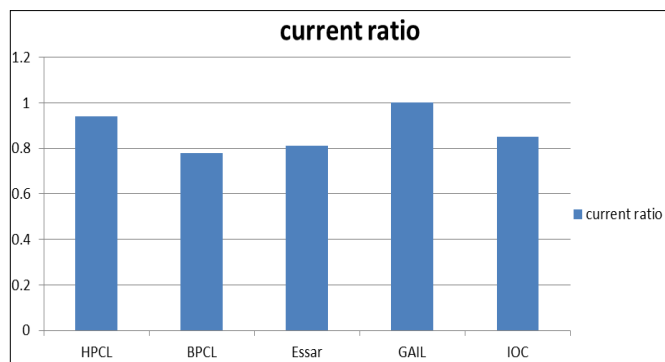


Fig 4

Interpretation

Current ratio is useful to test the short term debt paying ability of the entity. Generally a ratio of 2:1 or higher is considered to be satisfactory. In the above evaluation we can understand that no entity is with optimum current ratio. Liquidity position of HPCL is good when compared with BPCL, Essar, and IOC. GAIL liquidity position is better than the other four entities considered. HPCL is in the second position by attaining 4 points as performance gains.

Profitability ratio (return on equity)

The return on equity ratio or ROE is a profitability ratio that

measures the ability of a firm to generate profits from its shareholders investments in the company. In other words, the return on equity ratio shows how much profit each dollar of common stockholders' equity generates.

Table 7

| Particulars | Ratio | Performance gains |
|-------------|--------|-------------------|
| HPCL | 32.41% | 5 |
| BPCL | 28.21% | 4 |
| Essar | -6.01% | 1 |
| GAIL | 9.57% | 2 |
| IOC | 20.48% | 3 |

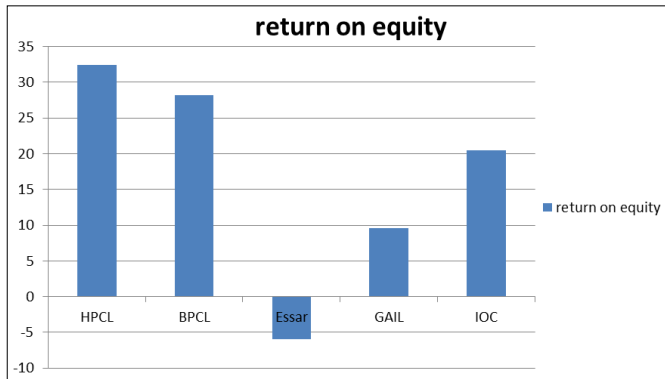


Fig 5

Interpretation

Return on equity measures how efficiently a firm can use the money from the shareholders to generate profits and grow the company. This ratio calculates how much money is made based on the investors' investments in the company, not the company's investment in assets. A higher ROE indicates that the entity is using investor's funds effectively. In the terms of profitability, HPCL is the best performing entity. HPCL is in the first position in terms of profitability, attaining 5 points as performance gains.

Solvency ratio (debt to equity ratio)

Debt/Equity (D/E) Ratio, calculated by dividing a company's total liabilities by its stockholders' equity, is a debt ratio used to measure a company's financial leverage. The D/E ratio indicates how much debt a company is using to finance its assets relative to the value of shareholders' equity.

Table 8

| Particulars | Ratio | Performance gains |
|-------------|-------|-------------------|
| HPCL | 1.04 | 4 |
| BPCL | 0.78 | 3 |
| Essar | 1.4 | 5 |
| GAIL | 0.13 | 1 |
| IOC | 0.54 | 2 |

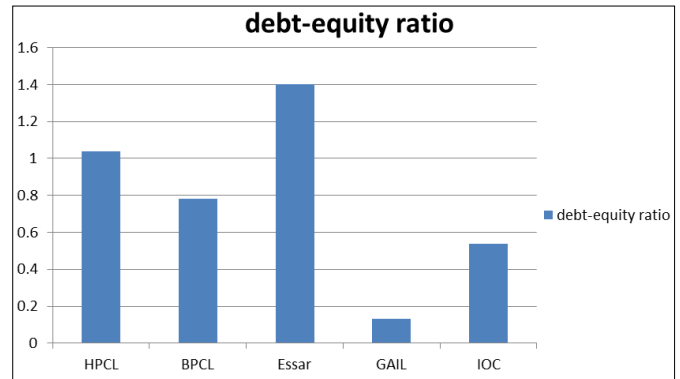


Fig 6

Interpretation

Debt-equity ratio analysis will describe the solvency position of the organisation. This ratio will describe the security levels of the funds provided by their creditors. Creditors always prefer to invest if the debt-equity ratio is below 1. Creditors would feel that their funds are secure if the ratio is below 1. In the above analysis we can say that investors in GAIL would feel more secured when compared to the other entities and HPCL is in the 2nd position attaining 4 performance gains in the above five entities in terms of solvency.

Overall performance gains and rank

Table 9

| Particulars | HPCL | BPCL | ESSAR | GAIL | IOC |
|---------------|------|------|-------|------|------|
| Liquidity | 4 | 1 | 2 | 5 | 3 |
| Profitability | 5 | 4 | 1 | 2 | 3 |
| Solvency | 4 | 3 | 5 | 1 | 2 |
| TOTAL | 13 | 8 | 8 | 8 | 8 |
| Average | 4.33 | 2.66 | 2.66 | 2.66 | 2.66 |
| RANK | 1 | 2 | 2 | 2 | 2 |

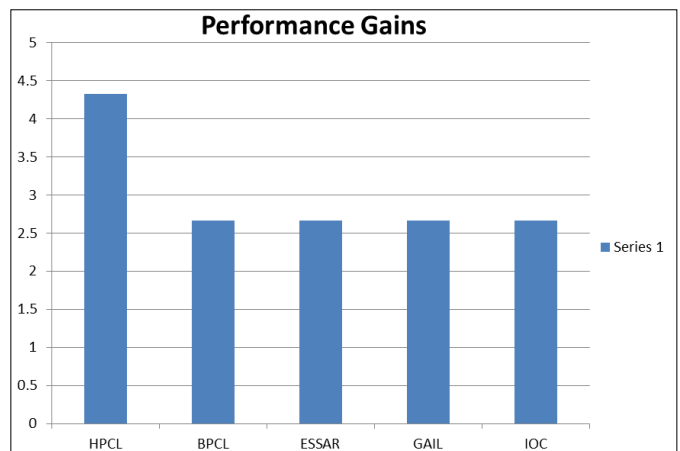


Fig 7

Interpretation

The above table proves that the performance of HPCL is good

when compared with the other entities which are under study. HPCL is maintaining good solvency, liquidity and profitability positions when compared with the other entities under study, which made HPCL stand at the top of other entities under study. Performance gains represent the points attained by the entity in correspondence with their performance. All the points attained by each entity are totalled and then taken average to find out the ranks for each entity. This ranking process proved the best performance of HPCL when compared with other entities under study.

Conclusion

This study proved that HPCL is performing better than many other highly performing firms of the same industry. HPCL is continuously developing its resources financially and also in other forms through fixed assets etc, and this is proved to be the reason for the better performance of the entity. HPCL is currently into several other interesting projects which make the study about the entity even more interesting, such as expansion of visakh refinery. This depicts that HPCL is searching room for development in its every stage.

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