Inspira-Journal of Commerce, Economics & Computer Science (JCECS)
ISSN : 2395-7069 GIF: 2.7273, CIF: 4.964, Volume 05, No. 03, July-September, 2019, pp. 311-320

SHORT-TERM FINANCIAL STRENGTH OF SELECTED PETROLEUM REFINING COMPANIES IN INDIA

Dr. Ruchi Khandelwal*
Prof. (Dr.) S.C. Bardia**

ABSTRACT

In the present global scenario, oil prices are behaving extremely unpredictably and there is a lot of volatility in the petroleum industry. This necessitates efficient management of liquidity in the petroleum companies, as the petroleum companies play an extremely significant role in the economy. As the prices of the fuel, directly or indirectly, affect the lives of everyone and have a critical impact on inflation, it is all the more important that the liquidity management of the petroleum companies is cost-efficient. One of the important tasks of a financial manager is to select an assortment of appropriate sources for a firm to meet its financial requirements. The short-term financial strength relates to the technical solvency of a business in the near future. In the present study, the management of the liquidity of the short-term financial strength of the selected petroleum companies has been analysed by employing ratios. For this purpose, three leading companies have been selected. The study is based on the annual reports, accounts and other publications of the selected petroleum refining companies in India. The study period is nine years, from 2009-10 to 2017-18.

***KEYWORDS**: Ratio, Quick Assets, Long-term and Short-term Financial Strength.*

Introduction

One of the important tasks of a financial manager is to select an assortment of appropriate sources for a firm to meet its financial requirements. Normally, the current assets of a firm are supported by combinations of long-term and short-term sources of financing. A long-term source of finance (equity share, preference share and long-term debt) provides support for a small part of current assets requirement. Short-term sources of finance, also referred to as current liabilities, provide major support to current assets. In selecting a particular source, the merits and demerits of the source, in the context of prevailing constraints, must be considered. There are two aspects of the financial strength of any business, short-term and the long-term. A major concern of investors is the question of the company's solvency. Both short-term and long-term solvency is the ability of a company to meet its debt obligations when they became due. An attempt has been made to assess the impact of proper management of current assets on the short-term financial strength selected petroleum companies.

Sources of Finance

The sources of finance of a firm may be classified broadly into two categories: long-term sources and short-term sources. Each of these can be further subdivided into internal and external sources, which are as follows.

- Long-term Internal Sources- Retained earnings and depreciation provision.
- Long-term External Sources- Equity share capital, preference share capital, debenture and bonds, and long-term loans from financial institutions, including commercial banks.

---

* Former Assistant Professor, Biyani Group of Colleges, Jaipur, Rajasthan, India.
** Vice Chancellor, Maharishi Arvind University, Jaipur, Rajasthan, India.

- Short-term Internal Sources- Proposed dividends and provisions for taxation.
- Short-term External Sources- Trade credit, accruals, bank credit, public deposits, inter-corporate deposits, commercial paper, deferred income, factoring and miscellaneous sources such as deposits from stockists and contractors, etc.

Appraisal of Short-Term Financial Strength

"Short-term solvency analysis begins with the comparison of total current assets to total current liabilities. It is usually expressed in a ratio."[1] "Technical solvency is related to the ability of a given business unit to meet its currently maturing obligations."[2] It is a special class of solvency defined by time interval of one year. The short-term financial strength relates to the technical solvency of a business in the near future. In judging the short-term financial strength of a company, the data published in the balance sheet are the primary sources of information. In the present study, the management of the liquidity of the short-term financial strength of the selected petroleum companies has been analysed by employing the following ratios:

- Current Ratio,
- Quick Ratio,
- Cash to Sales Ratio,
- Working Capital Turnover Ratio,
- Debtors Turnover Ratio,
- Inventory Turnover Ratio, and
- Current Asset Turnover Ratio.

The measurement of this forms the core of liquidity analysis. Two appropriate tests of this important feature of the working capital analysis are (i) Current Ratio (ii) Quick Ratio.

Current Ratio

The current ratio is the ratio of the total current assets of current liabilities. Current ratio is also called the working capital ratio of a firm. The current assets should be twice the amount of current liabilities for a business to be called technically solvent. According to Rudolph W. Schattke and Howard G. Jensen, "The current assets along with current liabilities inform us of the short run ability of the company to pay obligations as they become due. This ratio is a commonly used indicator of short term financial strength of the Company."[3] The current ratio of 2:1 is considered good for a business firm. The formula used for calculating "current ratio" can be expressed as:

Current Ratio= Total Current Assets/Total Current Liabilities

Current assets of the petroleum companies include inventories, receivables, cash and bank balances and loans and advances, while current liabilities include payables, provisions and loans and advances. The current ratio of BPCL, IOCL, and HPCL from 2009-10 to 2017-18 has been computed and presented in Table 1. The Table also includes the range, the co-efficient of range and the mean of current ratio.

Table 1: Current Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	1.38 H	1.33	1.25
2010-11	1.26	1.40 H	1.36 H
2011-12	0.85	0.94	0.86
2012-13	0.90	1.03	0.88
2013-14	1.03	0.99	1.13
2014-15	0.93	0.99	1.16
2015-16	0.89	0.91	1.03
2016-17	0.79 L	0.86	0.95
2017-18	0.82	0.76 L	0.78 L

Particulars	BPCL	IOCL	HPCL
Range	0.59	0.65	0.58
Coefficient of Range	0.27	0.30	0.27
Mean	0.98	1.02	1.04

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.

Note: H= highest L= lowest.

BPCL

It is evident from Table 1 that is BPCL the current ratio marked a fluctuating trend throughout the period of the study. It was 1.38 times in 2009-10, which decreased for the next two years to 0.85 times in 2011-12. However, it rose to 0.90 times in 2012-13 and to 1.03 times in 2013-14. It decreased for the next three years to 0.79 in 2016-17. Thereafter, it increased to 0.82 times in 2017-18.

It varied from 1.38 times in 2009-10 to 0.79 times in 2016-17 forming a range of 0.59 times. The average of this ratio was 0.98 times. The ratio was more than the average ratio during 2009-10, 2010-11 and 2013-14. The ratio was less than the average ratio during the rest of the years. The coefficient of the range was 0.27 times which was less than IOCL and equal to HPCL.

Table indicates that the fluctuations in this ratio were not so significant during the period covered by this study and also reveals that the current ratio of BPCL for all the years has been less than two.

IOCL

Table 1 contains the current ratio of IOCL for the period of the study. The current ratio of the company had a decreasing trend throughout the study period except 2010-11 and 2012-13. It was 1.33 times in 2009-10, which increased to 1.40 times in 2010-11. It decreased to 0.94 times in 2011-12. However, it increased to 1.03 times in 2012-13. Again, it decreased to 0.99 times in 2013-14 and remained constant in 2014-15. Thereafter, it continuously declined for the next three years to 0.76 times in 2017-18.

It varied between 1.40 times in 2010-11 and 0.76 times in 2017-18, forming a range of 0.65 times. The average of this ratio was 1.02 times. It is obvious that the ratio was greater than the average ratio during 2009-10, 2010-11 and 2012-13. The coefficient of the range was 0.30 times which was greater than BPCL and HPCL. It should be noted that the current ratio of IOCL for all the years has been less than two times during the period of the study.

HPCL

The current ratio of HPCL for the period of the study has been presented in Table 1. It reveals that the ratio had a fluctuating trend throughout the study period. The current ratio was 1.25 times in 2009-10 which increased to 1.36 times in 2010-11. Then, it declined to 0.86 times in 2011-12. However, it increased for the next three years to 1.16 times in 2014-15. Thereafter, it continuously decreased for the next three years to 0.78 in 2017-18.

It fluctuated from 1.36 times in 2010-11 to 0.78 times in 2017-18, forming a range of 0.58 times. The average of the ratio was 1.04 times. It should be noted that during 2009-10, 2010-11, 2013-14 and 2014-15 the ratio was more than the average ratio. The co-efficient of the range was 0.27, which was equivalent to BPCL and lower than IOCL. It should also be noted that the current ratio of HPCL for all the years had been less than two times during the period of the study.

Quick Ratio

As observed above, one drawback of the current ratio is that it fails to convey any information about the composition of current assets of a firm. A rupee of cash is considered equivalent to a rupee of inventory or receivables. However, it is not so, as a rupee of cash is more readily available, i.e. more liquid, to meet the current obligation than a rupee of say inventory. This impairs the usefulness of the current assets. The acid test ratio is a measure of liquidity designed to overcome this defect. It is often referred to as quick ratio, because it is a measurement of a firm's ability to convert its current assets quickly into cash in order to meet its current liability. Thus, it is a measure of quick or acid liquidity. As Brown and Havard observe, "Increased liquid resources more usually indicate an unwise use of funds which could be better employed."[4] For the purpose reference, a quick ratio of 1:1 is considered a fair indication of the good liquid position of a business firm. The realisation of cash in a business, except inventories, is treated as quick assets. The formula for calculating quick ratio can be expressed as follows:

Quick Ratio= Quick Assets/ Current Liabilities

This ratio is the true test of the solvency of a going concern. As a general rule, when quick assets equal, or exceed, the current liabilities, the financial position may be considered satisfactory. It is a measure of the extent to which liquid assets are available to meet the immediate liabilities. The quick ratio of BPCL, IOCL and HPCL from 2009-10 to 2017-18 has been presented in Table 2. The Table also includes the range, the co-efficient of range and the mean of quick ratio.

Table 2: Quick Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	0.67 H	0.51	0.49
2010-11	0.56	0.57 H	0.51
2011-12	0.50	0.50	0.41
2012-13	0.51	0.56	0.50
2013-14	0.53	0.52	0.59
2014-15	0.48	0.52	0.62 H
2015-16	0.45	0.52	0.55
2016-17	0.33 L	0.28	0.41
2017-18	0.36	0.28 L	0.39 L

Particulars	BPCL	IOCL	HPCL
Range	0.34	0.30	0.23
Coefficient of Range	0.34	0.35	0.23
Mean	0.49	0.47	0.50

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.
Note: H= highest L= lowest.

BPCL

The quick ratio of BPCL for the period of study showed a variable trend throughout the period of the study. The quick ratio was 0.67 times in 2009-10, which declined for the next two years to 0.51 times 2011-12. It increased for the next two years to 0.53 times in 2013-14. However, it decreased for the next three years to 0.33 times in 2016-17. Again, it increased to 0.36 times in 2017-18.

The range was 0.34 times and the average of ratio was 0.49 times. The actual ratio was lower than the average ratio during the period of the study except in 2014-15, 2015-16, 2016-17 and 2017-18. The coefficient of range was 0.34 times, which indicates that it was less than IOCL and higher than HPCL. It should be noted that the ratio in all the years had been less than the standard norm of 1:1.

IOCL

Table 2 depicts the quick ratio of IOCL which had variable trend throughout the period covered by this study. It was 0.51 times in 2009-10, which increased to 0.57 times in 2010-11. However, it decreased slightly to 0.50 times in 2011-12. Again, it increased to 0.56 times in 2012-13. It remained 0.52 times in 2013-14, 2014-15 and 2015-16. Thereafter, it fell to 0.28 times in 2016-17 and remained 0.28 times in 2017-18.

The average ratio was 0.47 times and the range was 0.30 times. The ratio was lower than the average ratio in 2016-17 and 2017-18, while it was higher in the rest of the years. The coefficient of the range was 0.35 times, which was the highest. It shows the variations in the ratio in this company were comparatively higher.

HPCL

The quick ratio of HPCL showed fluctuating trend throughout the period of the study. It was 0.49 times in 2009-10 which increased to 0.51 times in 2010-11. It decreased to 0.50 times in 2012-13. However, it increased for the next two years to 0.62 times in 2014-15. Thereafter, it declined for the next three years to 0.39 times in 2017-18.

The average ratio was 0.50 times and the range was 0.23 times. The ratio was lower than the average ratio in 2009-10, 2011-12, 2016-17 and 2017-18 while, it was higher in the rest of the years. The coefficient of the range was 0.23 times.

Cash to Sales Ratio

This is one of the important ratios of controlling cash. Chowdhary has observed that "Companies want to receive it cash quickly but hold as little of it as possible."[5] Professor John Sengan observes that "The increase in sales is generally associated with larger bank balances."[6] A study of cash to sales ratio provides a deep insight into the cash balances held by a concern. The ratio of cash turnover in sales is used to examine the utilisation of cash resources. The ratio measures the velocity with which cash moves through the business operations. The ratio is calculated as follows.

Cash Turnover in Sales = Net Sales/ Cash Balance

The cash to sales ratio of BPCL, IOCL and HPCL from 2009-10 to 2017-18 has been computed and presented in Table 3. The Table also includes the range, the co-efficient of range and the mean of cash to sales ratio.

Table 3: Cash to Sales Ratio (2009-10 to 2017-18)

(in percentages)

Years	BPCL	IOCL	HPCL
2009-10	0.28	0.53	0.28L
2010-11	0.25	0.43	0.31
2011-12	0.46	0.07	0.55
2012-13	0.97	0.11	1.13
2013-14	0.08	0.55H	0.09
2014-15	0.57	0.03	0.66
2015-16	1.09H	0.15	1.15H
2016-17	0.03	0.02	0.03
2017-18	0.03L	0.02L	0.04

Particulars	BPCL	IOCL	HPCL
Range	1.06	0.54	0.87
Coefficient of Range	0.94	0.94	0.61
Mean	0.41	0.21	0.47

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.

Note: H= highest L= lowest.

BPCL

Table 3 shows that in BPCL, the cash to sales ratio had a fluctuating trend throughout the period of the study. It was 0.28 percent in 2009-10, which decreased to 0.25 percent in 2010-11. However, it increased to 0.46 percent in 2011-12 and 0.97 percent in 2012-13. It decreased to 0.08 percent in 2013-14. Again, it increased to 0.57 percent in 2014-15 and 1.09 percent in 2015-16. However, it decreased to 0.03 percent in 2016-17 and 2017-18.

It varied from 1.09 percent in 2015-16 to 0.03 percent in 2016-17 forming a range of 1.06 percent. The average of this ratio was 0.41 percent. The actual ratio was more than the average ratio in 2011-12, 2012-13, 2014-15 and 2015-16. The coefficient of the range was 0.94 percent which was higher than that of HPCL and equivalent to IOCL.

IOCL

It is evident from Table 3 that the cash to sales ratio of IOCL had a fluctuating trend throughout the period of the study. It was 0.53 percent in 2009-10 which decreased to 0.43 in 2010-11 and to 0.07 percent in 2011-12. However, it increased to 0.11 percent in 2012-13 and 0.55 percent in 2013-14. Again, it decreased to 0.03 percent in 2014-15. It increased to 0.15 percent in 2015-16. Thereafter, it decreased to 0.02 percent in 2016-17 and remained same in 2017-18.

It varied from 0.55 percent in 2013-14 to 0.02 percent in 2017-18, forming a range of 0.54 percent. The mean of this ratio was 0.21 percent. The actual ratio was greater than the mean value in 2009-10, 2010-11 and 2013-14 and lesser in the rest of the years. The coefficient of the range was 0.94 times which was higher than that of HPCL but equivalent to BPCL. It shows that the fluctuations in this ratio were high during the period the study.

HPCL

Table 3 depicts that the cash to sales ratio of HPCL had a fluctuating trend throughout the period of the study. It was 0.28 percent in 2009-10, which increased for the next three years to 1.13 percent in 2012-13. It decreased to 0.09 percent in 2013-14. Again, it increased to 0.66 percent in 2014-15 and 1.15 percent in 2015-16, which was highest during the period of the study. However, it decreased to 0.03 in 2016-17 and 0.04 percent in 2017-18. The range was 0.87 percent and the average of ratio was 0.47 percent. The actual ratio was higher than the average ratio in 2011-12, 2012-13, 2014-15 and 2015-16. The coefficient of range was 0.61 percent which indicates that it was less than BPCL and IOCL.

It can be observed from the above analysis that the average percentage of this ratio in HPCL was much higher than that of BPCL as well as IOCL. The variations in the cash position of HPCL during the period of the study were not as significant as in the case of BPCL and IOCL. It should also be noted that, in IOCL the proportion of cash, as a percentage of sales was lower than the proportion of cash to sales in BPCL as well as HPCL.

Working Capital Turnover Ratio

Sales and working capital are closely associated with each other. With any increase or decrease in sales volume, there is a corresponding increase or decrease in the working capital. The turnover of working capital is computed to test the efficiency with which working capital is utilised. The ratio indicates the efficiency, or otherwise, in the utilisation of short term funds. In the short term, it is the current assets and current liabilities which play a major role. According to John N. Myer, "The ratio of sales to working capital is sometimes used to check the relationship but it is scarcely possible to establish a norm and since the ratio is used rather for the comparison of the sales and working capital in a series of years, such a comparison can be affected more satisfactorily by the use of the trend ratios of sales and working capital."[7] The ratio is computed as follows:

Working Capital Turnover Ratio= Net Sales/ Net Working Capital

Therefore, there may be different causes behind the favourable or unfavourable nature of this ratio. A high turnover of working capital may be the result of a favourable turnover of inventories and account receivables. On the other hand, it may reflect inadequacy of net working capital and low turnover of inventories and receivables. Inadequacy of net working capital may be due to excessive current liabilities. Harry Gross has also supported this view and suggested that "When the turnover figure gets too high, there would be too much strain on the financial structure of the business. Where the turnover of working capital is 100, it is a sign of possible inefficiency of the use of the financial resources of the company."[8] The relationship between the working capital and the sales of BPCL from 2009-10 to 2017-18 has been estimated and presented in Table 4.

Table 4: Working Capital Turnover Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	18.95	17.03	29.92
2010-11	26.83	12.62	17.72
2011-12	-29.40	-57.20	-30.00
2012-13	-55.80	107.35 H	-41.00
2013-14	242.90 H	-637.30 L	50.35
2014-15	-101.00 L	-502.70	52.86
2015-16	-52.30	-39.58	256.20 H
2016-17	-26.10	-28.30	-116.0 L
2017-18	-35.00	-15.43	-23.20

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 and 2017-18.
Note: H= highest L= lowest.

BPCL

It is clear from Table 4 the working capital turnover ratio of BPCL had a fluctuating trend throughout the period of the study. It was 18.95 times in 2009-10, which increased to 26.83 times in 2010-11. However, it decreased to -29.40 times in 2011-12 and -55.80 times in 2012-13. It increased to 242.90 times in 2013-14, which decreased to -101.00 times in 2014-15. Again, it increased to -52.30 times and -26.10 times in 2016-17. It was -35.00 times in 2017-18.

It varied from 242.90 times in 2013-14 to -101.00 times in 2014-15, forming a range of 343.90 times. It appears that the ratio fluctuated throughout the study period mainly because of high fluctuations in the amount of working capital.

IOCL

It is clear from Table 4 that the working capital turnover ratio of IOCL had a fluctuating trend throughout the period of the study. It was 17.03 times in 2009-10, which decreased for the two years to -57.20 times in 2011-12. It increased to 107.35 times in 2012-13. However, it decreased to -637.30 times in 2013-14. Thereafter, it increased for the next four years to -502.70 times in 2014-15, -39.58 times to 2015-16,-28.30 times in 2016-17 and -15.43 times in 2017-18.

It varies from 107.35 times in 2012-13 to -637.30 times in 2013-14, forming a range of 744.65 times.

HPCL

It is clear from Table 4 that the working capital turnover ratio of HPCL had a fluctuating trend throughout the period of the study. It was 29.92 times in 2009-10, which decreased for the next three years to 17.72 times in 2010-11, -30.00 times in 2011-12 and -41.00 times in 2012-13. However, it increased for the next three years to 50.35 times in 2013-14, 52.86 times in 2014-15 and 256.20 times in 2015-16. Again, it decreased to -116.0 times in 2016-17. It was -23.20 times in 2017-18. It varied from 256.20 times in 2015-16 to -116.0 times in 2016-17 forming a range of 372.2 times.

Accounts Receivables Turnover Ratio

The proportion of accounts receivables to sales is another method of examining the level of investment in sundry debtors. This indicates the credit and collection policy adopted by the company. A low ratio of accounts receivables to sales indicates the effectiveness of credit and collection policy of a company, while a higher ratio of accounts receivables to sales indicates greater investment in account receivables and slackness in credit and collection policies. The ratio shows the relationship between the turnover and the accounts receivables of a company. The ratio is computed as follows:

Accounts Receivables Turnover Ratio= Net Credit Sales/ Average Account Receivable (Average Debtors)

According to Spiller and Gosman, "The turnover of receivables provides information on the liquidity of the receivables."[9] It is the speed with which the receivables are converted into cash which matters. The ratio of accounts receivables to sales of BPCL, IOCL and HPCL from 2009-10 to 2017-18 has been computed and presented in Table 5.

Table 5: Account Receivable Turnover Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	59.82	42.5	34.37
2010-11	56.90	41.3	31.96
2011-12	46.88	35.7	36.41 H
2012-13	46.16 L	33.4 L	30.74
2013-14	64.17	42.5	28.11 L
2014-15	71.20	49.2	32.57
2015-16	79.33 H	47.4	29.91
2016-17	69.92	53.9	34.65
2017-18	55.93	54.4 H	31.98

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.

Note: H= highest L= lowest.

BPCL

It is evident from Table 5 that that accounts receivables turnover ratio had fluctuating trend throughout the period of the study. It was 59.82 times in 2009-10, which decreased for the next three years to 46.16 times in 2012-13. However, it increased for the next three years to 79.33 times in 2015-16. Again, it decreased to 69.92 times in 2016-17 and to 55.93 times in 2017-18. A high accounts receivables turnover shows the efficiency of credit collection policies.

IOCL

Table 5 indicates that the accounts receivables turnover ratio had a fluctuating trend throughout the period of the study. It was 42.5 times in 2009-10, which decreased for the next three years to 33.4 times in 2012-13. However, it increased for the next two years to 49.2 times in 2014-15. Again, it decreased to 47.4 times in 2015-16. However, it increased to 53.9 times in 2016-17 and 54.4 times in 2017-18, the highest during the study period. It can be observed that management of debtors during last two years was better. Higher debtor's turnover ratio indicates faster turn around and reflects positively on the liquidity of the company.

HPCL

Table 5 shows that the accounts receivables turnover ratio had a fluctuating trend throughout the period of the study. It was 34.37 times in 2009-10, which decreased to 31.96 times in 2010-11. However, it increased to 36.41 times in 2011-12. Again, it decreased to 28.11 times in 2013-14. It increased to 32.57 times in 2014-15 and decreased to 29.91 times in 2015-16. Again, it increased to 34.65 times in 2016-17. It was 31.98 times in 2017-18. The decrease in the turnover of debtors was the result of an increase in sales and a proportionately higher increase in debtors. This indicates that the accounts receivables management of the company was not very efficient.

Stock/Inventory Turnover Ratio

Inventory turnover ratio is also known as stock turnover ratio. "It is a method of reviewing performance and managing inventories periodically to check the inventory turnover of each type of raw material supply and finished goods." The ratio is an indicator of the efficiency of the use of investment in stock. The investment in stock should be within reasonable limits. Over-investment and under-investment both result in losses to the concern. According to Derbin and Harold,"A high turnover is better than a low turnover"[11] "Inventory turnover ratio acts as an indicator of liquidity of the inventory."[12] Inventory provides a measure of the velocity with which the inventory is used in the business concern. The ratio is calculated as follows:

Inventory Turnover Ratio= Cost of Goods Sold/ Average Inventory

The inventory turnover ratio of BPCL, IOCL and HPCL from 2009-10 to 2017-18 has been computed and presented in Table 6 as under:

Table 6: Inventory Turnover Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	12.60	8.64 H	6.54
2010-11	10.59 L	7.69	6.03 L
2011-12	12.59	7.82	6.43
2012-13	13.59 H	7.34	7.84
2013-14	13.31	7.19	7.84
2014-15	12.88	7.64	9.22
2015-16	11.54	8.26	9.50 H
2016-17	12.91	7.33	7.84
2017-18	12.20	6.67 L	8.12

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.
Note: H= highest L= lowest.

BPCL

Table 6 indicates that the inventory turnover ratio had a fluctuating trend. It was 12.60 times in 2009-10, which decreased to 10.59 times in 2010-11. However, it increased for the next two years to 13.59 times in 2012-13. Again, it fell for the next three years to 11.54 times in 2015-16. Then, it increased to 12.91 times in 2016-17 and decreased to 12.20 times in 2017-18.

IOCL

It is evident from Table 6 that the inventory turnover ratio had a variable trend. It was 8.64 times in 2009-10 which decreased to 7.69 times in 2010-11. However, it increased to 7.82 times in 2011-12. Again, it decreased for the two years to 7.19 times in 2013-14. Then, it increased for the next two years to 8.26 times in 2015-16. Thereafter, it decreased to 7.33 times in 2016-17 and 6.61 times in 2017-18. The reason of the decrease in the inventory turnover ratio was the continuous increase in the level of inventories.

HPCL

It is evident from Table 6 that the inventory turnover ratio of HPCL had an increasing trend throughout the period of study except 2010-11 and 2016-17. It was 6.54 times in 2009-10, which decrease to 6.03 times in 2010-11, the lowest during the study period. However, it increased for the next five years to 9.50 times in 2015-16, highest during the study period. Again, it fell to7.84 times in 2016-17. Thereafter, it rose to 8.12 times in 2017-18.

The reason for the decrease in the turnover ratio in HPCL was the increase in the level of inventory without a corresponding significant increase in sales, while the reason for the increase in the turnover ratio during the last years of the study was a substantial increase in the inventory of the company. The above analysis indicates that the inventory management of BPCL was better than IOCL and HPCL. It appears that the marketing efforts of BPCL and HPCL were better than of IOCL. It also appears that IOCL was not able to utilise its funds optimally.

Current Assets Turnover Ratio

Current assets turnover ratio is based on current assets and net sales. This ratio indicates how efficiently a firm is using its current assets to generate revenue. In other words, the current assets turnover ratio shows the productivity of the company's current assets. The current assets turnover ratio is calculated as follows:

Current Assets Turnover Ratio= Net Sales/ Current Assets

The current assets turnover ratio of BPCL, IOCL and HPCL from 2009-10 to 2017-18 has been computed and presented in Table 7 as under:

Table 7: Current Assets Turnover Ratio (2009-10 to 2017-18)

(in times)

Years	BPCL	IOCL	HPCL
2009-10	5.18 L	4.20	5.92
2010-11	5.49	3.64	4.65 L
2011-12	5.37	3.57	4.85
2012-13	6.25	3.48 L	5.40
2013-14	6.56	3.52	5.61
2014-15	7.86 H	4.56	7.48 H
2015-16	6.74	3.92	6.52
2016-17	7.07	4.80	6.49
2017-18	7.51	4.91 H	6.60

Source: Computed from Annual Reports and Accounts of BPCL, IOCL and HPCL from 2009-10 to 2017-18.
Note: H= highest L= lowest.

BPCL

It is evident from Table 7 that the current assets turnover ratio had an increasing trend except 2011-12 and 2015-16. It was 5.18 times in 2009-10, which increased to 5.49 times in 2010-11. It decreased to 5.37 times in 2011-12. Again, it increased for the next three years to 7.86 times in 2014-15, the highest during the study period. However, it decreased to 6.74 times in 2015-16. Thereafter, it increased for the next two years to 7.51 times in 2017-18.

IOCL

Table 7 shows that the current assets ratio of IOCL had a fluctuating trend. It was 4.20 times in 2009-10, which decreased for the next three years to 3.48 times in 2012-13, lowest during the study period. Thereafter, it rose to 3.52 times in 2013-14 and 4.56 times in 2014-15. Again, it decreased to 3.92 times in 2015-16. Thereafter, it increased to 4.80 times in 2016-17 and 4.91 times in 2017-18, highest during the study period.

HPCL

Table 7 shows that the current assets turnover ratio of HPCL had a fluctuating trend. The turnover was 5.92 times in 2009-10, which decreased to 4.65 times in 2010-11, lowest during the study period. However, it increased for the next four year to 7.48 times in 2014-15, highest during the study period. Then, it decreased to 6.52 times in 2015-16 and 6.49 times in 2016-17. It increased to 6.60 times in 2017-18.

Summary

A comparative study of the current ratio of the petroleum companies indicates that the current ratio of BPCL, IOCL and HPCL was always less than the generally accepted norm of 2:1. The quick ratio shows that the liquidity position of HPCL during the latter period of the study was relatively better than that of BPCL and IOCL. The quick ratio of all three companies was always less than the standard norm of 1:1, which indicates that its quick assets were not sufficient to meet its current obligations. The working capital turnover ratio was very low in IOCL in 2013-14 and 2014-15 which shows under-trading. In IOCL, this ratio was lower than the other two companies. The above analysis indicates that the inventory management of HPCL was better than BPCL and IOCL. It appears that the marketing efforts of BPCL and HPCL were better than those of IOCL. It also appears that IOCL was not able to utilise its funds optimally. The current assets turnover ratio and accounts receivable ratio of HPCL were lower than those of BPCL and IOCL. It is, therefore, suggested that all the three companies should try to improve their short-term financial strengths to maintain proper liquidity in business. It is further suggested that they should try to reduce their level of inventories to the maximum extent possible. It would help them meet their current obligations well in time.

References

⇒ A.B. Roy Chowdary, "Working Capital Management: A Work Book on Corporate Liquidity", (Kollkata: Management Technologists of 6 Southern Avenue, 1987), p. 83

⇒ Harry Gross, "Financing Small and Medium Sized Business", (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1985), p.34.

⇒ Ibid., p. 155.

⇒ James C. Van Horne, "Financial Management and Policy", (New Delhi: Prentice Hall of India (P) Ltd., 1983), p. 410.

⇒ James C. Van Horne, op. cit., p. 37.

⇒ John A. Tracy, “Fundamentals of Financial Accounting Concept and Uses", (Boston: Allyn and Bacon, 1969), pp. 131-132.

⇒ John N. Myer, "Financial Statement Analysis", 4th ed. (New Jersey: Prentice Hall Inc., Englewood Cliffs, 1969), p. 158.

⇒ John Sangan, "Towards a Theory of Working Capital Management", The Journal of Finance (Volume X May 1955).

⇒ L.R. Havard and J.R. Brown, "Managerial Accounting and Finance", (London: Mac Donald and Evans Ltd., 1971), p.592.

⇒ R. Derbin Allen and Bierman Harold, "Managerial Accounting- An Introduction", vol. 3 (Philadelphia: W.B. Sounders Co., 1975), p. 155.

⇒ Spiller and Gosman, "Financial Accounts Basic Concept", (Homewood, Illinois: Richard B. Irwin, Inc, 1984), p. 679.

⇒ W. Schattke Rudolph and Jensen G. Howard, "Financial Accounting Concept and Uses", (Boston: Allyn and Bacon, 1978), p. 43.

⇒ "www.bharatpetroleum.com".

⇒ "www.iocl.com".

⇒ "www.hindustanpetroelum.com".

❍❍❍