

# Analysis of Working Finance at HPCL

Dr. Ajay Maheshwari

Krishna College of Science and rural Technology, Fatehabad Road, Agra

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## Abstract

*an attempt has been made to analyse Working Finance in the context of its size, its adequacy and transmutation i.e., the speed with which it is being turned over from cash to inventories to receivables and to cash again. Profits and generation of cash are also affected by the size of Working Finance. Therefore, profitability has also been studied with reference to Working Finance. Debt-equity ratio affects profitability and the rate of return on investment and therefore the same has also been analysed. The present study of analysis of working finance in HPCL is unique in the sense that it aims at taking into account the impact of price level changes on the working capital management. The study is based mainly on an analysis and interpretation of published accounts of HPCL. Comparative financial analysis particularly the ratio analysis, funds flow analysis and trend analysis has been made. The study revealed that the planning and programming of materials was not satisfactory. With regard to the items of regular use, the system of automatic replenishment, based on re-order levels, was not followed.*

**Key Words :** Working Finance, Working Capital.

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## 1. INTRODUCTION

Working Finance is the other name of 'Net Working Capital'. Net Working Capital or Working Finance has been defined by Gitmann as "that portion of a firm's current assets financed with long-term debts". Here, an attempt has been made to analyse Working Finance in the context of its size, its adequacy and transmutation i.e., the speed with which it is being turned over from cash to inventories to receivables and to cash again. Profits and generation of cash are also affected by the size of Working Finance. Therefore, profitability has also

been studied with reference to Working Finance. Debt-equity ratio affects profitability and the rate of return on investment and therefore the same has also been analysed.

The present study of analysis of working finance in HPCL is unique in the sense that it aims at taking into account the impact of price level changes on the working capital management. It is different in the sense that a comparison of the actual level of funds involvement in the different components of working capital is to be made with the norms as set by the Chore Committee appointed by the RBI to prescribe norms of Working Capital. Inflation in the economy has become so rampant that almost 90 per cent of all the companies that go to raise funds through rights issue of shares used the money raised for working capital requirements rather than for expansion and also a substantial part of profits go to finance the working capital.

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## 2. RESEARCH METHODOLOGY

The study is based mainly on an analysis and interpretation of published accounts of HPCL. Comparative financial analysis particularly the ratio analysis, funds flow analysis and trend analysis has been made. Information from the officers and executives of HPCL has also been collected through personal interviews. Inter-firm comparisons have also been made in order to draw meaningful conclusions.

### (a) Objectives of the study

The main objectives of the study are :

- (i) To study the impact of investment in working finance in the financial performance of the company.
- (ii) To analyse the pattern and size of investment in working finance in HPCL.
- (iii) To suggest measures to improve the financial health of the company by indicating better ways of managing working finance.

### (b) Limitations of the Study

As private and public sector undertakings wary in opinion of showing their records to outsiders including those engaged in purely academic research, it was really difficult to get data.

## 3. COMPANY PROFILE OF HPCL

HPCL is a Fortune 500 company, with an annual turnover of over Rs 74,044 crores, 20 per cent refining & marketing share in India and a strong market infrastructure. The Corporation operates 2 major refineries producing a wide variety of petroleum fuels & specialties, one in Mumbai (West Coast) of 5.5 MMTPA capacities and the other in Vishakapatnam (East Coast) with a capacity of 7.5 MMTPA. HPCL holds an equity stake of 16.95 per cent in Mangalore Refinery & Petrochemicals Limited, a state-of-the-art refinery at Mangalore with a capacity of 9 MMTPA. In addition, HPCL is progressing towards setting up of a refinery in the state of Punjab. HPCL also owns and operates the largest Lube Refinery in the country producing Lube

Base Oils of international standards. With a capacity of 335,000 Metric Tones this Lube Refinery accounts for over 40 per cent of the country's total Lube Base Oil production.

HPCL is maintaining Stores and Spares equivalent 187.67 days' to 500.35 days consumption over the period under study. The Company has not fixed any limit for holding the Stores and Spares Inventory. The actual reason of maintaining a very high level of stores and spares inventory can be attributed to the fact that most of the items of stores and spares are imported. Imports take a higher lead time.

## 4. SIZE OF WORKING FINANCE

The table given below shows the size of Working Finance in HPCL.

**Table 1**  
Size of Working Finance in HPCL (Rs. in Crores)

Year	Historical Value	Restated Value
2013-14	3904.18 (100.00)	5075.44 (100.00)
2014-15	4315.25 ( 110.53 )	6904.4 (136.04)

**Note :** Figures in brackets show trend percentages.

**Source :** Annual Reports

Table 1 shows that the size of average Working Finance in HPCL has jumped to 110.53 per cent in 2014-15 with 2013-14 as base but the restated figures reveal the different story as the size of working finance has also increased to 136.04 per cent during the same period. The table reveals that the level of Working Finance is continuously increasing which implies that the company is adopting a policy of tight rope walking and wants to rely on cost free current funds from its suppliers. By releasing funds from working capital, the company is successfully increasing its Return on Capital Employed (ROCE). Speaking truly the size of Working Finance should move in tandem with sales with a positive correlation. This has been compared in table 3.

## 5. ADEQUACY OF WORKING FINANCE

Adequacy of Working Finance is a must to keep the fixed and long-term investment in action. The adequacy of Working Finance can be judged by computing Working Finance in terms of months' cost of production.

**Table 2**  
**Working Finance In Terms Of Months' Cost Of Production (excluding Depreciation) in HPCL**

Year	Months
2013-14	0.18
2014-15	0.31

Source : Annual Reports.

Working Finance in Terms of Months' Cost of Production

$$= \frac{\text{Year end Working Finance} \times 12}{\text{Cost of Production}}$$

Table 2 again confirms that HPCL has increased its investment in Working finance during the last year of the study. It is utilising short-term outside funds to finance its working finance needs. It is a rare phenomenon that in these days of rising input cost and labour, a company has been successful in increasing its turnover and profitability.

The government of India vide its circular No. SC/(C) - 2(27)162 dated September 7, 1961 fixed the level of working finance at 3 months' production-operating costs for Petroleum Industry in the country. If the same standard is accepted for HPCL also, it has been concluded that the level of working finance maintained by HPCL is much lower than norm prescribed as above.

## 6. TRANSMUTATION OF WORKING FINANCE

In order to see how efficiently working finance is being transmuted from inventories to receivables to cash to profits and back into cash again we have to work out the turnover of working capital in relation to sales.

**Table 3**  
**Turnover of Working Finance in HPCL**

Year	Times
2013-14	83.39
2014-15	33.24

Source : Annual Reports.

$$\text{Turnover of Working Finance} = \frac{\text{Sales during the year}}{\text{Year end size of Working Finance}}$$

The faster the transmutation of Working finance, the better it is. However, faster transmutation is bad when it is on account of over trading. HPCL, is not overtrading. The turnover rate of working finance was 83.39 times during the year 2013-14 which has gone to 33.24 times during the year 2014-15. This state of affairs adds feathers to the working capital finance in HPCL. Inventories as a percentage of total or gross current assets is yet another method of analysing the working finance.

**Table 4**  
**Percentage of Inventories to Current Assets in HPCL**

Year	Percentage
2013-14	60.02
2014-15	70.64

Source : Annual Reports.

Percentage of inventory to total current assets has increased from 60.02 per cent as at the end of the year 2013-14 to 70.64 per cent as at the end of the year 2014-15. These figures show that HPCL is increasing its investment in inventory more than in the other components of current assets.

**Table 5**  
**Percentage of Receivables to Current Assets in HPCL**

Year	Percentage
2013-14	10.61
2014-15	11.02

Source : Annual Reports.

Table 5 portrays the percentage of

receivables to current assets in HPCL. The percentage of receivables to current assets has been constantly increasing under the period of the study. It has reached to 11.02 per cent in 2014-15 from 10.61 per cent in 2013-14.

**7. TERMS OF PURCHASE AND SALES**

The size of working finance increases with credit sales and decreases with credit purchases. Thus, if a company makes purchases on credit for payment in a longer period of time and sells goods on cash or short period credit, fewer funds will be tied up. On the other hand, if purchases are made in cash and goods are sold on credit, the working capital requirement will be relatively large as there is no 'payables' to match receivables. One of the reasons of working finance being on the lower side in HPCL was that it made its cash sales.

**Table 6**

**Percentage of Net Profit on Capital Employed in HPCL**

Year	Percentage
2013-14	17.74
2014-15	18.32

Source : Annual Reports.

**Table 7**

**Percentage of Net Profit to Net Worth in HPCL**

Year	Percentage
2013-14	22.34
2014-15	24.39

Source : Annual Reports.

The percentage of net profit on net worth was 24.39 per cent in 2014-15 against 22.34 per cent in 2013-14. These percentages cannot be treated as a mark of efficiency. The efficiency that has been *prima facie* observed is partly the result of undercapitalisation. Yasaswy has rightly said "when a Company is suffocated from all sides because of inadequate funds, we may deduce that it is suffering from the disease of under-capitalisation".

**Table 8**

**Earning Per Share in HPCL**

Year	Rs.
2013-14	51.20
2014-15	80.72

Source : Annual Reports.

Table 8 exhibits that Earning for Share in HPCL was Rs. 51.20 in 2013-14 against Rs. 80.72 in 2014-15.

**8. DEBT EQUITY RATIO**

The financial plan of a company also affects the rate of return on shareholders' funds. The debt equity ratio "indicated the relationship between the long - term funds provided by creditors and those provided by the firm's owners". It is commonly used to measure the degree of financial leverage of the firm. It can be calculated in the following manner.

**Table 9**

**Debt Equity Ratio in HPCL**

Year	Percentage
2013-14	1.05 : 1
2014-15	1.13 : 1

Source : Annual Reports.

**Formulation**

$$\text{Debt-equity Ratio} = \frac{\text{Long-term debt}}{\text{Shareholders Equity}}$$

Debt equity ratio in HPCL is very poor. The company is not taking advantage of financial leverage. If the company takes advantage of trading on equity it can reduce its tax liability and increase the Earning Per Share (EPS). However, with debt financing the risk will also increase. Keeping in mind a very low Debt equity ratio of 1.13:1 as against recommended 2:1, the company can afford to take advantage of debt financing. HPCL can take advantage of financial leverage to improve its return on net worth and EPS. When the rate of return on capital employed is more than the rate of interest payable on borrowed funds, any company can be benefited by using borrowed funds. A higher debt-

equity ratio has also the advantage of savings in taxes for interest on debt capital is allowed as an expense whereas dividend is not also allowed. A higher ratio of debt to equity may be disastrous for companies where profitability is lower than the contractual rate on debt.

When a company is earning sufficient profits it is a conservative policy to raise finances through equity and the cost of equity is always higher than the cost of other sources of financing.

## 9. ECONOMIC VALUE ADDED (EVA)

Traditional approaches to measuring "Shareholders' Value Creation" have used parameters such as earnings capitalisation, market capitalisation and present value of estimated future value of estimated future cash flows. Extensive equity research has now established that it is not earnings per se, but Value which is important. A new measure called "Economic Value Added" (EVA) is increasingly being applied to understand and evaluate financial performance.

EVA = Net Operating Profit After Taxes (NOPAT) - Cost of Capital Employed (COCE), where,

NOPAT = Profits after depreciation and taxes but before interest costs NOPAT thus represents the total pool of profits available

on an ungeared basis to provide a return to lenders and shareholders, and

COCE = Weighted average cost of capital (WACC) × Average Capital Employed.

Cost of debts is taken at the effective rate of interest applicable to an "AAA" rated company like HPCL with an appropriate mix of short, medium and long-term debt, net of taxes. We have considered a pre-tax rate of 14 per cent after taking into account the trend over the years.

Cost of equity is the return expected by the investors to compensate them for the variability in returns caused by fluctuating earnings and share prices.

Cost of equity = Risk-free return equivalent to yield on long term Government bonds (taken at 12.5 per cent)

(+)

Market risk premium (taken at 9 per cent) × Beta variant for the Company, (taken at 0.8), where the Beta is a relative measure of risk associated with the Company's shares as against the market is a whole. Thus HPCL's cost of equity = 12.5 per cent + 9 per cent × 0.8 = 19.7 per cent

EVA is residual income after charging the Company for the cost of capital provided by lenders and shareholders. It represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business.

### (a) EVA will increase if

- (i) Operating profits can be made to grow without employing more capital i.e., greater efficiency.
- (ii) Additional capital is invested in projects that return more than the cost of obtaining new capital, i.e. profitable growth.
- (iii) Capital is curtailed in activities that do not cover the cost of capital, i.e., liquidate unproductive capital.

### (b) EVA in practice at HPCL

In Hindustan Petroleum Corporation Limited, the goal of substantial long-term value creation for our shareholders is well understood by all the business groups. Measures to evaluate business performance and to set targets take into account this concept of value creation.

It can be concluded that the level of Working Finance is continuously declining which implies that the company is adopting a policy of tight rope walking and wants to rely on cost free current funds from its suppliers. By releasing funds for working capital, the company is successfully increasing the

ROCE. It is utilizing short-term outside funds to finance its working finance needs. It is a rate phenomenon that in these days of rising input cost and labour a company has been successful in increasing its turnover and profitability.

The management of working finance is one of the most important aspects of firm's overall financial management. The importance of working finance management is clear from the fact that current assets tend to consume about one-half of the total investment in a manufacturing concern. No wonder "the best brains in every company are now-a-days spending their precious time to receive the problems of working finance". In earning a reasonable rate of return, working finance plays a variety of roles-functional, complementary, proportional and technical. Each has its own importance.

Availability of money to a firm is seldom or never unlimited. Money in all case has a cost. The finance function was once viewed simply as the task of providing the funds needed for an enterprise on the terms most favourable in the light of the objectives of the business.

But the finance function is broader than the task of funds procurement or supply. "It can and should contribute to the basic business objectives of building values". Speaking broadly, values will be maximised only if the firm's resources are used effectively.

## 10. CONCLUSION

The study revealed that the planning and programming of materials was not satisfactory. With regard to the items of regular use, the system of automatic replenishment, based on re-order levels, was not followed.

In HPCL, the purchasing departments greatly contributed to the stock piling by (a) not adopting suitable methods for making purchases (b) taking too much lead time, (c) not concentrating on the value analysis, (d) making un-even purchases and (e) involving in purchases unrelated to actual requirements.

Lead time has two components: (i) Administrative Lead Time and (ii) Delivery Lead Time. The purchasing department can be held responsible only for the administrative lead time which arises almost out of its own behaviour and action. The administrative lead time was found longer in HPCL. Lack of standardisation, uncongenial organisation and longer lead time has led to excessive inventory.

To find out the efficiency in the management of receivables the trend and its amount should first be established. The trend percentage of historical figures reveals a higher degree of change whereas the trend percentage of restated figures is not showing any remarkable change. The size of receivables is chiefly determined by the amount of sales affected.

It is not practical to lay down a uniform standard for the turnover of debtors as the circumstances from industry to industry differ depending upon the condition of demand in the industry. Where there is a buyers' market, lower turnover ratio may be considered right but in case of sellers' market, the debtors' turnover ratio should be higher. Since its inception HPCL has been sailing in the sellers' market Therefore, the debtors' turnover ratio should be high in HPCL.

A look at the figures of sales and year end accounts receivables reveal an impressive performance. A low turnover ratio means high volume of investment in accounts receivables benefiting the company in the form of low carrying costs.

Around 1.73 per cent of the sales made in any year remain unrealised. This is a good state of affairs. A tight fist policy means loss of sales and as a contrary to it loss of profit also. While the company is facing tough competition from other petroleum companies, it can think of relaxing its credit policy. It can thus tap newer markets. However, such a relaxation should not lose sight of recovery problems.

From the stand point of average collection period also the position in HPCL seems fascinating. The norm for holding of book debts is 20 days as set by Reserve Bank of India study group. The average of different years' average period is 6.95 days which in accordance with the norm prescribed by the Central Bank of India.

Receivables in HPCL accounted for the second major use of their working finance. The primary object of this chapter was, therefore, to search out the efficiency of the use of working funds in this component.

The efficiency in the use of working finance in receivables was very impressive. The analysis of the size of receivables has shown that receivables are being managed on the basis of sound commercial principles.

The sufficiency of cash in terms of the fulfillment of current operational requirements of a business enterprise is judged by the computation of cash i.e. the ratio of cash plus other liquid assets to current operating costs and expenses. The product of this ratio when multiplied into 365 gives the number of days for which the cash held was sufficient to finance the normal expenditure of the business enterprises.

Low current ratio in different years in HPCL. Throughout the years under study, current ratio is below the standard of 2:1. This indicates either low investment in current assets or higher utilisation level of spontaneous credit (current liabilities).

A low quick ratio in different years in HPCL. Throughout the years under study, quick ratio is below the standard of 1:1. The reason of low current ratio is lower level of cash balances and higher level of current liabilities.

## 11. SUGGESTIONS

(a) For reducing the overstocking in the spares component of inventory, the unit under study should initiate and implement Import Substitution Programmes. According to the Nakra Committee 'Management will have to

take deliberate and calculated risks and risk insurance item will have to be kept to minimum and slow moving items procured in accordance with the pre-determined plans of repairs and replacement and not carried as idle inventory for long periods. The Committee also suggested that financial ceilings should be determined for the purchases of spares.

- (b) The most important method of controlling the size of inventory is the standardisation of the plant and equipment, which in final run reduces the number of varieties stocked to controllable minimum in an enterprise. It is said that the rationalisation of the stores items can reduce the number of items stocked by 30 to 40 percent and help achieve quite possibly a cost reduction of 6 to 8 percent.
- (c) HPCL should always try to maintain an adequate quantum of net current assets in relation of current liabilities as to keep a good amount of liquidity throughout the year liquidity.
- (d) The company must increase its level of quick assets in relation to current liabilities which will also increase the ratio of networking capital to current liabilities.
- (e) The company must maintain a reasonable level of absolute liquid assets in order to meet short-term commitments and emergency requirements. This will also help the company in increasing its working finance margin. The company may also. Make adequate arrangement of credit facilities with banks as to maintain good amount of liquidity at its end.
- (f) The inventory of slow moving items should be reduced to the maximum possible extent. Suitable format presenting the level of different components of an inventory at fixed time interval be introduced to exercise an effective control on the overall inventories maintained by HPCL.

- (g) The company should tighten the debt collection efforts and should reduce the amount tied-up in debtors. In order to improve the quality of debtors and also to bring down the amount tied-up in debtors, a periodical report of the overdues may be prepared and effective action may be taken by the management time to time to expedite the collections.
- (h) The management of HPCL should also try to maintain a definite proportion among various components of working finance in relation to overall current assets to keep an adequate quantum of liquidity all the times. Such proportion can be worked out on the basis of past experience by the management of HPCL.

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