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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1	**Customer Perception Towards Medical Tourism: The Next Big Leap**. Dr. V. Selvam, Dr. T.V. Malick and N. Abdul Nazar	1-18
2	**The Enigma Of Group Cohesion: An Empirical Study With Reference To Automobile Industry.** **Dr. V. Jayashree**	19-51
3	**Application of Soft Computing Techniques to Prediction of Faulty Classes in Object Oriented Software.** Divya Jain and Vibhor Sharma	52-66
4	**Ethical And Socially Responsible Marketing In Indian Business: A Conceptual Outline.** Lokendra Vikram Singh, Archana Singh and Dr. R.S. Waghela	67-89
5	**Rewards And Risks In Stock Markets: A Case Of Emerging Economies**. Pooja Yadav and Prof. B. S. Bodla	90-128
6	**Crawling, Indexing and Searching Silverlight Applications.** Ahmad Mateen and Muhammad Naveed Arshad	129-142
7	**Indian Economic Policy – Some Issues.** Dr. M. Sugunatha Reddy and Dr. B. Rama Bhupal Reddy	143-170
8	**A Study Focus On Working Capital Management Of Bharat Petroleum Corporation Limited (Bpcl).** Dr. N. PASUPATHI	171-187
9	**Consumer Attitude Towards Newspapers.** Mr. Ajit Dhar Dubey	188-207
10	**A comprehensive study about the Repercussion of Recession.** Richa Arora and Nitin R. Mahankale	208-224

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Title

A STUDY FOCUS ON WORKING CAPITAL MANAGEMENT OF BHARAT PETROLEUM CORPORATION LIMITED (BPCL)

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ABSTRACT:

In his study made an attempt to analysis the working capital management of Bharat Petroleum Corporation Limited (BPCL). The period covered in this study is ten years commencing from 1999-2000 to 2008-2009 which is supposed as a normal and stable period. He concluded that the overall position of the working capital is satisfactory, but there is a need for improvement in certain factors. The major portion of the current assets is the form of inventory. The investment in current assets should consider liquidity, profitability and solvency. It is very important to trade off between liquidity and profitability by properly arranging the needed funds at right time period and sources.

INTRODUCTION:

Working capital is the single best method of determining the position of a company, or how well that company may be doing. It also provides the firm with liquidity, which is essential for the efficacious use of the fixed assets and thereby for achieving the expected rate of return. It is the measurement of the availability of liquid assets a company has to build its business. Generally, companies that have a lot of working capital will be more successful since they can expand and improve their operations. Companies without working capital may lack the funds necessary for growth. If working capital dips too low, a business risks running out of cash. Even very profitable businesses can run into trouble if they lose the ability to meet their short-term obligations. Business financing or small business loans can be used as a fast cash option to cushion the periods when the flow is not ideal or readily available.

A sound and systematic approach to the working capital management should ensure trade-off between liquidity and profitability. In the absence of adequate liquidity, firms become technically insolvent and the rest of the apparatus of financial analysis becomes redundant. While inadequate working capital results in risk of inability in meeting payment schedules, excess working capital adversely affects the profitability. Managerial decisions relating to cash, receivables, inventory and marketable securities are ultimately reflected in liquidity, risk and profitability and in turn in the value of the firm. Hence working capital is of immense importance to internal and external analyst. Deciding the size and means of financing the current assets is a

continuous challenge to any financial manager. So, there is an imperative need for effective management of working capital.

The objective of working capital management is to maintain the optimum balance of each of the working capital components. The individual components of working capital can be effectively managed by using various techniques and strategies. Furthermore, working capital management is not an end in itself. It is an integral part of the department's overall management.

The present study attempts to evaluate the working capital management of Bharat Petroleum Corporation Limited (BPCL) for a period of ten years.

Objectives of the study:

- To analyze the size, composition, circulation of working capital
- To determine the short-term liquidity position
- To measure the liquidity and operational efficiency
- To study the association of profitability with the working capital ratios
- To study the financing patterns adopted by the company regarding its working capital
- To suggest an effective way for management of working capital.

The period covered in this study is ten years commencing from 1999-2000 to 2008-2009 which is supposed as a normal and stable period.

Sources of data:

The study was mainly based on secondary data. The data for the study are drawn from published annual reports by the sample unit selected for the research. Required information were also collected from PROWESS, which is the most reliable and empowered corporate database of CMIE.

Finding and discussions:

As the size of working capital increases, both the enterprises risk and return would decrease and vice versa. The purpose of the study is to examine the issues like how large is the investment in working capital and its various components, how the quality of current assets has evolved over time, and whether working capital and its various components have been utilized efficiently by the selected oil industry during the period under study.

Size and circulation of working capital:

Current assets to total assets:

It is very important to analysis to total assets because fixed assets are financed through long term sources and current assets are financed through short-term sources. An increase in the ratio of current assets to total assets will result in decline in the profitability of the firm. This is because investment in current assets is less profitable than that in the fixed assets. However an increase in the ratio would decrease the risk of the firm becoming technically insolvent.

Table 1 indicates that the current assets have formed equal proportion of total assets. On an average 41.36 per cent of the total funds are invested for working capital purpose. This varied from 26.79 in 2008-09 to 41.19 in 1999-2000. The table also indicates that the level of investment in respect of total assets was more or loss uniform during the study period.

Current assets to sales ratio:

Current assets to sales ratio helps to measure the turnover and profitability of the total current assets employed to conduct the operations of a firm. It also gives an overall impression of how rapidly the total investment in current assets is being turned out.

Table 1 shows the fluctuating trend in the current assets to sales ratio during the period of the study. It ranged between 8.84 in the year 2008-09 to 15.54 in 2007-08. On an average the selected units maintained current assets to sales ratio at 13.34.

Current ratio:

CR measures the general liquidity and is most widely used to make the analysis of a short term financial position of liquidity of a firm. An increase in these ratios represents improvement in the liquidity position of a firm while a decrease in these ratios indicates that there has been deterioration in the liquidity position of the firm. The current ratio of the selected industry has been exhibited in Table 1. It shows that the current ratio of the selected industry varied from 0.52 in 2008-09 to 1.13 in 2000-01. The mean value for this ratio is 0.99 and CV was 18.54 per cent during the study period.

Liquid ratio:

Quick ratio or Liquid ratio (LR) is a more rigorous test of liquidity than the current ratio, yet it should be used cautiously. It is used as a complementary ratio to the current ratio. The rule of thumb is 1:1 for the LR judged from the norm, the liquidity position was weak as its LR fluctuated between 0.22 in 2008-09 to 0.37 in 2002-03 on an average this ratio was 0.33. It is clear that in all the year the liquid assets of the industry were not adequate during the study period. An analysis of circulation of working capital highlights the efficiency with which it is being utilized. The analysis is done with certain turnover ratios which reflect upon the efficiency in the use of working capital and its components.

Inventory turnover ratio:

Turnover of inventory directly affects the liquidity and profitability of a firm. It indicates the number over during a particular accounting period. Since it measures the velocity of conversion of stock into sales, high turnover indicates efficient management of inventory because more frequently the stocks are sold; the lesser amount of money is required to finance the inventory. This ratio varied from 12.21 in 2003-04 to 37.04 in 2000-01. On average it was 20.67. Out of ten years of study the inventory turnover ratio was higher than the mean for three years.

Receivable turnover ratio:

Receivable turnover ratio shows the relationship between the size of firm's sales and the magnitude of uncollected bills. It gives a general measure of the productivity of the receivables inventories. Low ratio indicates a lower degree of liquidity of receivables and high ratio would indicate greater liquidity of receivables. The mean value of the ratio was 57.68. This rate varied from 42.09 in 1999-2000 to 85.49 in 2008-09. Except the first five years of the study period the receivables turnover ratio signifies that the industry followed a steady and uniform credit policy.

Working capital turnover ratio:

It indicates the velocity of the utilization of net working capital and number of times the working capital is turned over in the course of a year. The higher the turnover, the greater the efficiency and the larger the rate of profits. It is observed from the table 1 that working capital turnover ratio fluctuated in all the years. The minimum ratio was 31.74 in 2005-06 and maximum was 174.54 in 2003-04 with the overall average of 82.75. The CV was 54.45. It can be concluded that the management capital only for 2003-04 and 2008-09 in during the study period.

Composition of working capital:

An element wise analysis of gross working capital enables one to examine in which element the gross working capital funds are locked up and find the factors that are responsible for the significant changes in the working capital of different years. Nearly 60.58 per cent of the current assets are in the form of inventory. It has been observed form the Table 2 that the inventory constitutes a major portion of working capital. Receivables the second major components of working capital comprises on an average of 31.74 per cent of the current assets. The table further brings out that cash components claimed 6.12 per cent and other assets claimed 1.57 per cent on an average. To conclude that as per the analysis the inventories formed major components of working capital in the selected unit followed by receivables, other current assets and cash.

Inventory management:

Inventory to working capital is one of the important ratios, which directly shows operational efficiency and profitability of organizations. It has been observed from the table that inventory constitutes (25.17) a major portion towards total assets when compared to other type of assets.

It is better to maintain an optimum level of inventories that is needed in an organization because if they become too large, the firm loses the opportunities to employ those funds more effectively similarly if they are too small, the firm may lose sales. Hence, it is necessary to analyze the size of inventory and the impact on working capital management. It is evident from the Table 3 that the average for finished goods proportion works out to 79.97 per cent as against 16.52 per cent for stores and spares and 3.51 per cent as against work-in-progress. The finished goods inventory has a large share to aggregate inventory followed by stores and spares and work-in-progress.

Receivable management:

Management of receivables involves a trade off between the gains due to additional sales on account of liberal credit facilities and additional cost of recovering those debts. However, credit sales not only result in blockage of funds in accounts receivables but also increase chances of bad debts. Follow up of debtors and credit collection is an integral part of management of sundry debtors. According to Table 4, the mean value of receivables to total assets work out to 12.98 per cent whereas the receivables to sales ratio worked out 4.18, the debts to receivables 47.98 per cent and loans and advances worked out to 29.04 per cent during the study period. The debts to receivables has a large share to aggregate receivables followed by receivables to sales and loans and advances.

Cash management:

The aim of cash management is to maintain equilibrium between liquidity and profitability of an undertaking so as to facilitate the realisation of business objectives. Every firm must maintain some minimum cash and bank balances i.e., immediate liquidity to meet day to day requirements for petty expenses, general expenses and even for cash purchases. The minimum cash requirements for transactions can be estimated on the basis of past experience. The cash and bank balance is the least productive of all the current assets, hence a minimum balance be maintained and it also provide liquidity to the firm, which is of utmost importance to any firm.

Table 5 indicates that the cash to current liabilities on an average 6.61 per cent and 0.82 per cent as against cash to sales ratio. The CV for cash to current liabilities was 27.79 whereas the CV value for cash to sales was 38.01 during the period under study. The table also shows the composition of cash during the research period. The mean value for cash at bank was 61.99 per cent and 38.01 per cent of cash was in hand. The CV was 33.53 against cash at bank and 54.68 as against cash in hand. The study brings to light that the industry preferred to save cash with bank.

Sources of financing of working capital:

Normally, the current assets of a firm are supported by a combination of long-term and short-term sources of financing. The long-term sources of finance provide support for a small part of current assets requirements which is called net working capital or working capital margin. The short-term sources of finance referred to also as current liabilities provide the major support for current assets. In Table 6 explain the relative importance of long-term and short-term debt in financing working capital. It is evident from the table that the average proportion of financing assets from long term sources was 9.91 per cent. The average percentage of long-term funds used for financing working capital in industry was 6.61 per cent. As per the analysis it was clear that the working capital funds of the concern mainly financed by short-term funds.

Conclusion:

The present study points out that the overall position of the working capital is satisfactory, but there is a need for improvement in certain factors. The major portion of the

current assets is in the form of inventory. The investment in current assets should consider liquidity, profitability and solvency. The industry should also try to maintain adequate quantum of liquidity all the times by keeping considerable proportion of various components of the working capital in relation to the overall current assets. It is very important to trade off between liquidity and profitability by properly arranging the needed funds at right time, period and sources.

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Table 1

Statistical values of ratio relating to the size and circulation of Working capital (1999-2000 to 2008-2009)

Year	CA to TA	CA to Sales	CR	LR	ITR	RTR	WTR
1999-00	47.19	13.79	1.11	0.31	28.59	42.09	84.08
2000-01	46.00	12.79	1.13	0.42	37.04	46.26	97.98
2001-02	37.08	11.96	0.97	0.33	34.23	38.81	84.49
2002-03	44.08	15.38	0.99	0.37	19.16	44.88	96.80
2003-04	41.21	13.70	0.98	0.37	12.21	50.92	174.54
2004-05	45.10	14.50	1.09	0.29	13.22	62.27	32.57
2005-06	44.32	14.83	1.18	0.29	14.99	68.98	31.74
2006-07	37.94	12.02	0.94	0.27	16.59	67.43	70.10
2007-08	43.90	15.54	1.01	0.42	14.12	69.65	32.44
2008-09	26.79	8.84	0.52	0.22	16.52	85.49	122.78
Mean	**41.36**	**13.34**	**0.99**	**0.33**	**20.67**	**57.68**	**82.75**
CV	**14.74**	**15.23**	**18.54**	**19.93**	**44.26**	**26.48**	**54.45**

Table 2

Statistical values of composition of working capital (% of total CA) (1999-2000 to 2008-2009)

Year	Inventory	Receivables	Cash	Other CA
1999-00	60.68	31.21	7.38	0.73
2000-01	55.31	37.72	6.56	0.41
2001-02	57.61	33.12	6.82	2.45
2002-03	58.93	30.66	9.02	1.39
2003-04	57.85	31.29	8.46	2.40
2004-05	67.58	26.44	3.80	2.18
2005-06	71.63	21.86	3.90	2.62
2006-07	67.04	25.02	6.69	1.25
2007-08	56.09	38.05	5.09	0.77
2008-09	53.07	41.99	3.43	1.51
Mean	**60.58**	**31.74**	**6.12**	**1.57**
CV	**10.09**	**19.79**	**32.29**	**50.96**

Table 3

Statistical values of ratio relating to the size composition and Movement of inventory (1999-2000 to 2008-2009)

Year	Inventory to TA	FG to Inventory	S & S to Inventory	WIP to Inventory
1999-00	28.63	92.27	5.81	1.92
2000-01	25.44	86.81	11.27	1.92
2001-02	21.36	87.81	10.62	1.57
2002-03	25.98	89.83	7.59	2.59
2003-04	23.84	86.42	11.68	1.91
2004-05	30.47	83.71	14.17	2.12
2005-06	31.75	70.94	23.94	5.12
2006-07	25.43	76.27	18.20	5.53
2007-08	24.62	57.78	36.88	5.34
2008-09	14.22	67.87	25.02	7.11
Mean	**25.17**	**79.97**	**16.52**	**3.51**
CV	**19.67**	**14.11**	**58.15**	**57.83**

Table 4

Statistical values of ratio relating to the size and composition of receivables (1999-2000 to 2008-2009)

Year	Receivables to TA	Receivables to Sales	Debts to Receivables	L & A to Receivables
1999-00	14.73	4.30	68.50	22.23
2000-01	17.35	4.82	84.05	17.74
2001-02	12.28	3.96	29.91	26.79
2002-03	13.51	4.72	43.44	35.03
2003-04	12.89	4.29	16.04	40.28
2004-05	11.92	3.83	58.51	45.75
2005-06	9.69	3.24	23.38	24.41
2006-07	9.49	3.01	34.97	21.99
2007-08	16.70	5.91	28.83	11.17
2008-09	11.25	3.71	92.14	45.01
Mean	**12.98**	**4.18**	**47.98**	**29.04**
CV	**20.53**	**20.12**	**25.09**	**40.84**

Table 5

Statistical values of ratio relating to the size and composition of cash (1999-2000 to 2008-2009)

Year	Cash to CL	Cash to Sales	Cash in hand	Cash at bank
1999-00	8.34	1.02	6.42	93.58
2000-01	8.21	0.84	62.78	37.22
2001-02	6.95	0.81	51.68	48.32
2002-03	8.43	1.39	10.81	89.19
2003-04	7.45	1.16	16.28	83.72
2004-05	3.84	0.55	51.48	48.52
2005-06	5.23	0.58	38.46	61.54
2006-07	7.65	0.80	46.40	53.60
2007-08	6.59	0.79	33.24	66.76
2008-09	3.44	0.30	62.57	37.43
Mean	**6.61**	**0.82**	**38.01**	**61.99**
CV	**27.79**	**38.01**	**54.68**	**33.53**

Table 6

Sources of financing of working capital (1999-2000 to 2008-2009)

S.No	Particulars	BPCL
1	Working Capital (Gross)	1,10,290.60
2	*Sources of working capital*	
	(a) Short term funds	99,366.14
	(b) Long term funds	10,924.46
3	Total Long term funds *(Net Worth + Long term Debt)*	1,65,268.20
4	Percentage of long term funds used fir financing working capital *(2b as % of 3)*	6.61