

Ratio Analysis On Working Capital Management of National Hydroelectric Power Corporation Limited Through

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Abstract-Working capital is essential for any business for achievement of its objective. company must properly manage its working capital management and it helps in maintaining company financial soundness and liquidity. In this study we are going to analyze through ratio analysis tool effect of working capital management at Hydroelectric Power Cooperation Limited. National hydroelectric Power Corporation limited (NHPC Limited) is company work in hydro power generation and case study object to check working capital components and checking its ability to pay off its liability from its available current assets as working capital management is to manage working capital to utilize maximum use of assets to create value for shareholders, increase sales, uses cash effectively, pay creditors and manage debtors. The study it is found that the financial position of the company was sound and company is increasing its profit and production. Ratios Show positive Net Working Capital which show company good liquidity. There is positive relation between profitability, sales and working capital management.

Keywords - NHPC, Ratio Analysis, Working capital management.

I. INTRODUCTION

National Hydroelectric Power Corporation limited (NHPC Limited) is a Mini Ratna category-I company in India and it is serving nation more than four decades as it was incorporated in the year 1975 to plan, promote and organize integrated and efficient of development of national hydroelectric power in all aspects as its objective later on its expanded to other sources of energy too such as solar power, tidal energy, geothermal, wind energy etc. It has authorized share capital of 150 billion, its headquarter in Faridabad, India and it is in one of the company among the top ten companies in terms of investment NHPC is. NHPC got listed itself in National Stock Exchange (NSE) as well as Bombay Stock Exchange (BSE) in 2009 and its 74.51% share held by Government of India and state Government and other 25.49% shares by the public. NHPC operating and generating electricity through many project in India and distributing electricity within the nation as well as helping neighboring countries such as Nepal, etc.

Working capital is an important factor which directly affect profitability of firm. Managing working capital will help manager to work efficiently. Firm may maximize the value by having optimal level of working capital. It may have positive or negative both impact on shareholder wealth. No other industry could exist without power industry.

NHPC has shown a good progress from last few years and awarded many awards for its good work and selected as "Best Miniratna" at Dun & Bradstreet PSU Awards 2016, "Best Hydropower Enterprise Award" by Hydropower Forum of India under the aegis of Enerzia Foundation and Renewable Energy Promotion Association at the 2nd India Hydro Awards 2016 held at New Delhi on 10 June 2016. Management, Directors and employees working toward a better performance and managing its resources to produce clean books of accounts, streamline operation. Here we will see how NHPC focus on its resource utilization, controlling with liabilities. working capital management is one of the effective method to see how company manages its current assets and current liabilities through different ratios such as accounts payable, current ratio, net working turnover ratio, etc

II. LITERATURE REVIEW

Researchers have work on this important matter in numerous ways, some work on components of working capital management, impact of working capital management. As in previous research of Lazaridis I, tryfonidis D shows the negative relationships between receivable and profitability of the firm in his research. Average days of account payable and profitability of firm is negatively correlated and relationship between the average no of inventory and profitability is negative.

Ebenezer, Agyemang Badu and Asiedu, Michael Kwame (2013) in the research also studied the effect of working capital management on the profitability of companies listed on the Ghana stock exchange on manufacturing companies and in result of study there is significant effect of working capital management on profitability of companies.

Haresh, working capital management and profitability : Evidence from India, 2012 support the management of working capital is important for the health of all firms and the firm's investment in the short term refer as working capital. Barot Haresh, Working Capital Management and profitability : Evidence from India- An empirical study. This study found the negative relationship between accounts receivables and profitability of firms and positive relationship between the accounts payable and profitability of firms. Firms need to manage working capital effectively to strengthened it. Profitability of the firm can be increased by managing their accounts receivables, accounts payable,

cash and inventories properly. This study is applies to pharmaceutical firms or similar firms.

Amarjit Gill, The relationship between working capital management and profitability : Evidence from The United States found that by reducing the number of days for accounts receivable managers can create value for their shareholders of the company. Further the study suggest that firms with less profitability would pursue a decrease accounts receivables to reduce cash gap in the cash conversion cycle and there is negative relationship between accounts receivable and profitability of firms. To enhance profitability of firms should manage there working capital management. The study is done on American manufacturing industry firms. Gross operating profit is taken as the dependent variable and other to be dependent variables i.e. Accounts receivables , Firms Size, Financial Debt ratio, Financial asset ratio.

R.Sivarajani, A Comparative Analysis of Working Capital management among top 5 NSE Listed Indian steel companies. The study found positive relationship between operating efficiency and profitability in top 5 steel companies .Manager need to identify the area in the operation where they could improve the financial performance of the firm and that purpose practice of working capital management would help manager. Inventory, accounts receivable and accounts payable is an important factor which can increase profitability of firms by handling them efficiently.

Richard Kofi Akoto examine the Working capital management and profitability : Evidence from Ghanaian listed manufacturing firms on 13 listed manufacturing firms in Ghana to examine the profitability and liquidity affected by the working capital management. In the research there is shown a significant negative influence of accounts receivable on profitability of the firms of Ghana. If firms need to improve its profitability it has to reduce its average receivable days to 30 days. There is positive relationship found in the study between accounts payable and profitability of the manufacturing firms firms of Ghana. There is positive impact of current asset on the firm’s profitability. Manager of manufacturing firms of Ghana should have enough current asset to match the current liabilities of the firms. Less cash conversion cycle is ideal to improve profitability and create shareholder value.

Need of the study: In current scenario profitability and financial soundness of company is prime concern and it is also dependent on how efficiently company manage its working capital. Working capital is required for day to business as short term business need i.e. less than one year or one financial year. Shortage in working capital can affect day to day operation of the firm and if it is in excess then it can become idle that also affect the firm. Now the question arises that how public company manages its

working capital and its profitability and for this National hydroelectric power corporation limited is taken, so to understand how it manage its profitability and working capital.

OBJECTIVE OF THE STUDY:

- ▣ To understand working capital and profitability and its uses.
- ▣ To analyses the impact of working capital management on National hydroelectric power Corporation Limited.
- ▣ To analyses financial performance of National hydroelectric power Corporation Limited.

Scope of the study:The scope of the study is National hydroelectric power Corporation Limited only.

Data Collection:Data collection for the study is based on secondary source such as Audited financial reports issued by the National hydroelectric Power Corporation Limited for the public, Journals, Research Paper, etc.

III. DATA ANALYSIS

Table 1 : Current Assets (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Current Investment	250.74	250.74	250.74	256.44	1.13
Inventories	49.60	64.22	79.84	90.64	94.50
Trade Receivables	2247.09	2240.05	2422.43	2905.18	2388.64
Cash and Bank	7795.32	7976.46	6142.7	6941.02	7443.89
Short Term Loan and Advances	2157.35	2452.84	2732.55	2083.01	242.72
Other Current Assets	1959.41	2247.71	1776.78	2009.87	2155.33
Total	14459.51	15232.02	13405.12	14286.16	12326.17

SOURCES: ANNUAL REPORTS

Interpretation : In this table current assets are shown in 2011-12 it was 14459.51, in 2012-13 it rises to 15232.02 due to increase in short term loan and advances, cash and bank and other current assets. in 2013-14 it decreases to 13405.12 then again it shows rise in 2014-15 to 14286.16 and in 2015-16 it was 12326.17. this show up and down in current assets from 2011-12 to 2015-16. there is sudden decrease in current investment in 2015 due to maturity of 8.50% Tax-Free State Government Special Bonds of the Government.

Table 2 Current Liabilities (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Short Terms Borrowings	180.00	-	-	-	-
Trade Payables	227.52	189.14	223.41	164.43	131.85
Other Current Liabilities	3141.05	3198.26	3263.70	3293.30	3310.41
Short Terms Provisions	4524.99	4276.46	3805.66	3654.44	2464.03
Total	8073.56	7663.86	7292.77	7112.17	5906.29

Sources: Annual reports

Interpretation : Analyzing this table shows decrease in current liabilities from year 2011-12 to 2015-16 in 2011-12 it was 8073.56 , in 2012-13 it was 7663.86 where short term borrowings were paid off , 2013-14 is 7292.77, in 2014-15 it was 7112.17 and in 2015-16 it was declined to 5906.29 due to decrease in short term provisions. In 2012-13 repayment of short term borrowing in form of secured bank loan of amount Rs. 180.00 cr. It can be observed that company is focuses on controlling it liabilities.

Table 3 Net Working Capital (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Current Assets	14459.51	15232.02	13405.12	14286.16	12326.17
Current Liabilities	8073.56	7663.86	7292.77	7112.17	5906.29
New Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88

SOURCES: ANNUAL REPORTS

Interpretation : In this table net working capital is shown positive from 2011-12 to year 2015-16 which shows company's good ability to repay it's current obligations with current assets . Company maintain high liquidity and uses current assets efficiently.

Table 4 Current Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Current Assets	14459.51	15232.02	13405.12	14286.16	12326.17
Current Liabilities	8073.56	7663.86	7292.77	7112.17	5906.29
Current Ratio	1.79	1.98	1.83	2.00	2.08

SOURCES: ANNUAL REPORTS

Interpretation : from the above table it analysis that the current ratio of the company is increases from 1.79 in year

2011-12 to 2.08 in 2015-16 . It attained it's standard current ratio in year 2014-15 I.e. 2:1. It indicates the company ability's to repay it's current obligations in time when they due.

Table 5 Liquid Ratio(Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Liquid Assets	14409.91	15167.80	13325.28	14195.52	12231.67
Current Liabilities	8073.56	7663.86	7292.77	7112.17	5906.29
Liquid Ratio	1.78	1.97	1.82	1.99	2.07

SOURCES: ANNUAL REPORTS

Interpretation : In the above table it is show that there is steady increase in liquid ratio from 2011-12 to 2015-1 i.e. 1.78 to 2.07 which is higher than the standard liquid ratio/quick ratio i.e. 1:1. Liquid ratio is high as compared to current liability of the company.

Table 6 Working capital Turnover (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Sales	8152.95	7617.23	8738.03	9157.27	9577.28
Net Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88
Working capital Turnover	1.27	1.01	1.43	1.27	1.49

SOURCES: ANNUAL REPORTS

Interpretation : from the above table ,it can be understand working capital turnover decreases ratio from 2011-12 to 1.01 in 2012-13, then increase in 2013-14 in 1.43 ,1.27 in 2014-15 and 1.49 in 2015-16. It shows good utilization of working capital.

Table 7 Current Liabilities to Net Worth Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
New Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88
Current Liabilities	8073.56	7663.86	7292.77	7112.17	5906.29
Current Liabilities to Net Worth Ratio	0.79	0.99	0.84	1.01	1.08

SOURCES: ANNUAL REPORTS

Interpretation : in the above table current liability to net worth ration ,it shows overall an increase from year 2011-

12 to 2015-16 from 0.79 to 1.08, but in 2013-14 it decrease from 0.99 in 2012-13 to 0.84 ,then again increases to 1.01 in 2014-15. It is higher then the desired level I.e 1/3.

Table 8 Inventory Management Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Inventories	49.60	64.22	79.84	90.64	94.50
New Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88
Inventory Management Ratio	0.008	0.008	0.013	0.013	0.015

SOURCES: ANNUAL REPORTS

Interpretation : from the above table of inventory management ratio ,it is analysis that inventory management ratio is maintaining a stable and increasing over the period from year 2011-12 to 2015-16.

Table 9 Inventories to Current Assets Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Inventories	49.60	64.22	79.84	90.64	94.50
Current Assets	14459.51	15232.02	13405.12	14286.16	12326.17
Inventories to Current Assets Ratio	0.003	0.004	0.006	0.006	0.008

SOURCES: ANNUAL REPORTS

Interpretation : it can be analysis from the table above that inventories shown an increasing trend from 49.60 in 2011-12 to 94.50 in 2015-16 and current assets shows slightly up and down all these years but inventories to current assets ratio stay same from year 2011-12 to 2015-16 ,only a minor increase shown from 0.003 in 2011-12 to 0.008 in 2015-16 .

Table 10 Inventories To Turnover Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Sales	8152.95	7617.23	8738.03	9157.27	9577.28
Inventories	49.60	64.22	79.84	90.64	94.50
Inventories To Turnover Ratio	164.36	118.61	109.44	101.03	101.35

SOURCES: ANNUAL REPORTS

Interpretation : It can be seen from the table that inventories are shown an increasing trend from 49.60 in

2011-12,64.22 in 2012-13, in 2013-14 it was 79.84 ,in 2014-15 was 90.64 and 94.50 in 2015-16 but inventories to turnover ratio show constant decline from year 2011-12 to 2015-16 from 164.36 to 101.35.

Table 11 Receivable Management(Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Receivables	2247.09	2240.05	2422.43	2905.18	2388.64
Net Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88
Receivable on Net working Capital	0.35	0.30	0.40	0.40	0.37

SOURCES: ANNUAL REPORTS

Interpretation : From table receivable management, analysis that receivable on working capital is 0.35 in year 2011-12 , it decreases in 2012-13 to 0.30 , increases in 2013-14 to 0.40 and remain 0.40 in 2014-15 then slightly decrease to 0.37 in 2015-16.

Table 12 Payable Management(Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Trade Payables	227.52	189.14	223.41	164.43	131.85
Net Working Capital	6385.95	7568.16	6112.35	7173.99	6419.88
Payable on Net Working Capital	0.04	0.03	0.04	0.02	0.02

SOURCES: ANNUAL REPORTS

Interpretation : it can be understand from the table that the payable are shown up and down during 2011-12 to 2015-16 first decrease in year 2012-13 to 0.03 from 2011-12 is 0.04 ,in 2014-15 and 2015-16 it was 0.02. It can be said payable remaining between 0.02 to 0.04 in all these years 2011-12 to 2015-16.

Table 13 : Cash Turnover Ratio (Rs. Amounts in crore)

Particulars	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Sales	8152.95	7617.23	8738.03	9157.27	9577.28
Cash and Bank	7795.32	7976.46	6142.7	6941.02	7443.89
Cash Turnover Ratio	1.04	0.95	1.42	1.32	1.29

SOURCES: ANNUAL REPORTS

Interpretation: from the above table ,we can analysis that the cash turnover ratio is decreased in year 2012-13 to 0.95

from 1.04 in 2011-12 then it up in 2013-14 to 1.42, in 2014-15 and 2015-16 is again decrease to 1.32 and 1.29.

SUGGESTIONS:

- ▣ The scope of the study is limited to one company i.e. NHPC Limited, study can be done in other set of firms and industry.
- ▣ Increase Cash balance to increase to improve company liquidity.
- ▣ Managing cash Flow will increase opportunity to increase sales by effectively coordinating between cash inflow and cash out flow.
- ▣ Use of more own earning by company can reduce the burden of dividend and interest as there is large dependence on borrowings by company.
- ▣ Effective measures should be taken by the company to recover the outstanding of the company.

IV. CONCLUSION

NHPC Limited is one of the important Minratna company in generation of electricity in India through hydro, solar, wind ,geothermal energy ,etc . over four decades National hydroelectric power corporation limited is contributing in country's growth .National hydroelectric power corporation limited started in 1975 and today it is integrated company in India and it is the one of the most trustworthy supplier of Power. Company from inception shows steady growth have measured both in economic and industrial area. Utilization of company's resource is properly utilized. National hydroelectric power corporation limited should try to manage and improve its financial position in future years also. Manager need to identify the area in the operation where they could improve the financial performance of the firm and that purpose practice of working capital management would help manager. Inventory, accounts receivable and accounts payable is an important factor which can increase profitability of firms by handling them efficiently.

At last it is to be concluded that NHPC Limited was seeing to be sound and it is working on increase of company Net Profit and production.

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