# A Study on Analysis of Financial Performance Of National Thermal Power Corporation LTD

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Abstract- The performance of NTPC, a prominent player in the power generation sector, is crucial for its stakeholders and the broader energy landscape. In order to assess and understand the financial health and operational efficiency of NTPC, there is a need for a comprehensive ratio analysis. This study aims to investigate and analyse the key financial ratios of NTPC over a specific period. The primary objective is to identify the company's strengths, weaknesses, opportunities, and threats through a thorough examination of liquidity, profitability, solvency, and efficiency ratios. Additionally, the study aims to provide insights into the overall financial stability and performance of NTPC, offering valuable information for investors, management, and policymakers. By conducting a detailed ratio analysis, this research intends to contribute to informed decision-making and strategic planning in the context of NTPC's financial management and corporate governance.

*Keywords*- Liquidity, profitability, short-term, long term debt obligation.

# I. INTRODUCTION

National Power Thermal Corporation Limited (NPTCL) is a key player in the energy sector, contributing significantly to the generation and distribution of power in the region. The evaluation of its financial performance is crucial for various stakeholders, including investors, analysts, regulators, and the company itself. This comprehensive assessment aims to provide insights into NPTCL's financial health, efficiency, and overall operational effectiveness.

National Power Thermal Corporation Ltd established with the primary objective of ensuring a stable and reliable power supply, NPTCL has emerged as a prominent player in the power sector. The company plays a pivotal role in power generation, transmission, and distribution, addressing the energy needs of the nation. Its strategic importance within the energy landscape underscores the significance of evaluating its financial performance

The financial performance of NPTCL is a critical indicator of its sustainability, growth potential, and ability to meet its financial obligations. Stakeholders, including investors, lenders, and regulatory bodies, rely on financial performance metrics to make informed decisions. A thorough evaluation helps in assessing the company's capacity to invest in new projects, service its debt, and maintain operational efficiency.

### II. STATEMENT OF THE PROBLEM

The National Thermal Power Corporation Ltd (NTPC) stands as a cornerstone in the Indian power sector, contributing significantly to the nation's energy needs. As the demand for electricity continues to rise and the energy landscape evolves, it becomes imperative to comprehensively assess the financial strength of NTPC. This evaluation aims to address critical questions and challenges associated with NTPC's financial position, thereby providing valuable insights for stakeholders, investors, policymakers, and industry experts by evaluate NTPC's profitability over recent fiscal periods, considering key financial metrics such as net income, operating income, and return on investment and assess NTPC's liquidity position, examining its ability to meet shortterm obligations and respond to unforeseen financial challenges. The findings of this evaluation are expected to be instrumental for investors, regulatory authorities, and NTPC's leadership in fostering a robust and resilient financial foundation for the corporation's future endeavours.

# III. OBJECTIVES OF THE STUDY

- To analyse the liquidity and solvency position of the company and to determine how effectively the company leverages its assets to generate revenue.
- To evaluate the profitability and to determine how efficiently the capital have been employed in the company.
- To evaluate a company's ability to meet its short-term and long-term debt obligations.

Page | 77 www.ijsart.com

# IV. RESEARCH METHODOLOGY

The research involved both the internal and external studies of NTPC limited. The study undertake the financial performance of NTPC limited.

#### DATA COLLECTION:

### SECONDARY DATA

The data has collected from the balance sheet and profit & loss account of NTPC limited.

### PERIOD OF STUDY

The study covers the period of 5 years from (2018-2023).

# TOOLS FOR ANALYSIS

The tools implemented to analyse the financial performance of NTPC limited are:

**Profitability ratios:** net profit ratio, operating profit ratio, return on asset.

Liquidity ratios: current ratio, quick ratio.

**Solvency ratio:** Debt to asset ratio, Equity ratio, Debt to equity ratio.

### V. ANALYSIS AND INTERPERTATION

# 5.1. PROFITABILITY RATIO

**TABLE 5.1.1 - NET PROFIT RATIO** 

YEAR	NET PROFIT	NETSALES	NETPROFIT RATIO
2023	23550.82	173985.61	13.54
2022	19500.78	132669.28	14.70
2021	16315.06	111267.88	14.67
2020	15972.11	109078.63	14.64
2019	14653.7	99615.00	14.71

### INTERPERTATION:

From the above table, it is understood that net profit was higher in the year 2019 with 14.71 as net profit ratio and the lowest was in the year 2023 with 13.54 as net profit ratio.

TABLE 5.1.2 - OPERATING PROFIT RATIO

YEAR	OPERATION PROFIT	NET SALES	OPERATING PROFIT RATIO
2023	34293	173985.61	0.20
2022	30303	132669.28	0.23
2021	25930	111267.88	0.23
2020	28960	109078.63	0.27
2019	16187	99615.00	0.16

# INTERPERTATION:

From the above Table, Operating profit ratio for year 2022 is high gross profit ratio with 0.27, gross profit ratio for the year 2022 is 0.23, gross profit for the year is 0.20 and finally gross ratio for the year is 2023.

**TABLE 5.1.3 - RETURN ON ASSET** 

YEAR	OPERATING PROFIT	CAPITAL EMPLOYED	RETURN ON ASSET
2023	34293	358536	9.56
2022	30303	337646.04	8.98
2021	25930	325630.04	7.96
2020	28960	311000.49	9.31
2019	16187	268423.97	6.03

# INTERPERTATION:

Above table clearly states that the gross profit ratio, year 2023 is high gross profit ratio with 9.56, return on asset for the year 2020 is 9.31, return on asset for the year is 9.56and finally gross ratio for the year is 2023.

# 5.2. LIQUIDITY RATIO

**TABLE 5.2.1 – CURRENT RATIO** 

YEAR	CURRENT ASSET	CURRENT LIABLITY	LIQUDITY RATIO
2023	81168.33	87485.45	0.93
2022	71393.86	78870.69	0.91
2021	68370.53	73336.17	0.93
2020	65960.98	67484.95	0.98
2019	51874.41	78237.19	0.66

# INTEERPERTATION:

From the above calculation, it is understood that the Current ratios for the year 2023 of 0.93 is increased from the year 2019 of 0.66. When the current ratio is lower than 1, it means the company is unable to pay off their liabilities, but in

Page | 78 www.ijsart.com

this case, since the ratio are greater than 1 it is clearly understood that the company can pay off their liabilities.

**TABLE 5.2.2 - QUICK RATIO** 

YEAR	QUICK	CURRENT	QUICK
ILAK	ASSET	LIABILITIES	RATIO
2023	66927.96	87485.45	0.77
2022	61254.57	78870.69	0.78
2021	58560.93	73336.17	0.80
2020	54822.44	67484.95	0.81
2019	43622.79	78237.19	0.56

### INTERPERTATION:

In the above table clearly states that the quick ratio, year 2020 is high quick ratio with 0.81, quick ratio for the year 2019 is 0.56, quick ratio for the year is 0.77 and finally gross ratio for the year is 2023.

# **5.3. SOLVENCY RATIO:**

TABLE 5.3.1 - DEBT TO ASSET RATIO

YEAR	TOTAL DEBT	TOTAL ASSET	DEBTTO ASSET RATIO
2023	295067.83	446021.45	0.66
2022	277382.58	416516.73	0.67
2021	269704.03	398966.21	0.68
2020	256329.09	378485.44	0.68
2019	232396.75	346661.16	0.67

# **INTERPERTATION:**

Above table clearly states that the debt to asset ratio, year 2021 is high debt to asset ratio with 1.50, debt asset ratio for the year 2019 is 0.67, debt asset ratio for the year is 0.66 and finally gross ratio for the year is 2023.

**TABLE 5.3.2 - EQUITY RATIO** 

YEAR	TOTAL	TOTAL	EQUITY
ILAK	EOUITY	ASSETS	RATIO
2023	150953.62	446021.45	0.34
2022	135750.15	416516.73	0.33
2021	129262.18	398966.21	0.34
2020	122156.35	378485.44	0.32
2019	114264.41	346661.16	0.33

# INTERPRETATION:

Above table clearly states that the equity ratio, year 2021 is high equity ratio with 0.34, equity ratio for the year 2020is 0.33, for the year is 0.34and finally gross ratio for the year is 2023.

**TABLE 5.3.3 - DEBT TO EQUITY RATIO** 

YEAR	TOTAL DEBT	TOTAL SHAREHOLDERS EQUITY	DEBT TO EQUITY RATIO
2023	295067.83	147023.17	2.01
2022	277382.58	135373.74	2.05
2021	269704.03	125738.47	2.15
2020	256329.09	118839.16	2.16
2019	232396.75	111356.21	2.09

### **INTERPRETATION:**

Above table clearly states that the debt-to-equity ratio, year 2020 is high debt equity ratio with 2.16, a debt equity ratio for the year 2019 is 2.09, debt equity ratio for the year is 2.01 and finally gross ratio for the year is 2023.

#### VI. LIMITATION OF THE STUDY

- In this study, the selected ratios are only selected.
- In the financial data are collected only the period of five years 2019 to 2023.
- The study has been made only by the secondary data.

### VII. FINDINGS

Profitability: NTPC has shown consistent improvement in profitability, with increasing Net profit ratio, Operating profit ratio, Return on asset.

Liquidity: The bank maintains a stable liquidity position, as evidenced by its constant current ratio and a slight increase in the quick ratio.

Solvency: while the total debt to total asset ratio remains stable, the debt-to-equity ratio has increased, suggesting a higher reliance on debt financing.

Overall, NTPC limited financial performance appears solid with positive trends in profitability, stable liquidity and solvency in efficiency over the study period.

### VIII. SUGGESTION

Current ratio of NTPC indicates poor liquidity position the company and it is suggested that the company must reduce the amount of current liabilities and/or increase the amount of current assets up to a reasonable level.

The liquidity position of company is not good all the ratios of the liquidity are below the standard which is not sound for the company day to day requirements. so it is

Page | 79 www.ijsart.com

suggested that the company should take necessary steps to maintain the adequate level of ratio.

NTPC has not been able to efficiently use the increase in inventory stock over the period of the study. It is suggested that the level of inventory should be fixed up scientifically in order to avoid the problem of under-stocking and over-stocking.

Total assets turnover ratios were low during the study period and must improve towards a positive direction. The company should maintain a fixed percentage of sales revenue regarding cost of employees' remuneration.

# IX. CONCLUSION

The present study is devoted to the evaluation of financial performance of National Thermal Power Corporation Limited from 2018-2019 to 2022-2023. The researcher used accounting ratios in order to measure the financial performance of NTPC Ltd. liquidity, solvency profitability position has been analysed in this study. From the analysis it has been cleared that the short-term liquidity and solvency position of the company is not satisfactory during the period of the study. The current ratio and quick ratio were lower than the standard norms. The profitability ratio shows that company earns adequate profit during the study period but the management of the company should focus to improve the profitability as it was declining in later years. From the analysis it is cleared that the sales hasn't significant impact on liquidity, solvency and profitability position of NTPC Ltd. Findings of the study brought the conclusion that the overall financial performance of NTPC Ltd. was satisfactory and the sales have no impact on liquidity, solvency and profitability ratios.

### X. REVIEW OF LITERATURE

Khan, Arabian J (2017) Financial Performance Evaluation of National Thermal Power Corporation Limited (NTPC), Financial performance evaluation is the process of discovering economic facts about an enterprise on the basis of interpretation of the available financial data. The primary objective of financial performance evaluation is to give an accurate picture of the financial condition of a concern in condensed form. The present study has been undertaken to examine the financial performance of NTPC for a period of ten years from 2006-07 to 2015-16. Data have been collected from various published annual reports and financial statements. Liquidity, profitability, management efficiency, solvency and market valuation ratios have been calculated and analysis Multiple regression technique has been used to

evaluate the impact of liquidity, solvency and management efficiency on profitability of NTPC. ROCE, ROA, and ROE have been taken as proxy measures of profitability. The findings highlighted that there is no significant impact of current ratio and inventory turnover ratio on profitability. However, debt-equity ratio has a significant impact on profitability of NTPC.

Sania Mushahid (2018) Evaluation of financial performance of national thermal power corporation limited. Old is gold goes in the same way as old and wise saying and this is appropriate to the black diamond as well in the perspective of thermal power plants. As more than 70% of India's electricity is produced by coal fired power plant. Since coal is crucial to meet the needs of the country being a scarce resource therefore its financial positions is also critical to analyse, hence both are important in their own sphere and are need of an hour. Financial position refers to the degree to which financial objectives has been accomplished. It is used to measure firms overall financial health over a given period of time. The concerned study investigates the financial position of Thermal power in India with special reference to National Thermal Power Corporation Limited. The qualitative as well as quantitative aspect of financial performance has been touched in this paper. The findings are based on the five years financial data i.e. from 2011-12 to 2015-16 of National Thermal Power Corporation Limited. The financial health of National Thermal Power Corporation Limited is measured on the basis of ratio analysis. The main emphasis in this study has been given to evaluate the financial performance with respect to measure the impact of liquidity, solvency and profitability ratios on sales. For testing the hypothesis of the study researcher run linear regression analysis on SPSS. The findings highlighted that there is no significant impact of sales on liquidity position, solvency position and profitability position of National Thermal Power Corporation Limited.

Pavan Mishra (2019) Analysis of Financial Strength of National Thermal Power Corporation Limited (NTPC Ltd.) In general, the financial strength of a company can be measured in three key areas: profitability, liquidity and solvency. Profitability measures a company's ability to make profit or positive net income for a given level of sales or investment. Liquidity measures a company's ability to utilize its resources available to meet its short-term commitments. achieve this. The need for liquidity of current assets could not be over emphasized. The efficient management of liquidity is an integrated part of overall finance management and has a bearing on the objective of the consolidation of short-terms solvency position to the study has academic and practical significance, the study focuses on the performance of liquidity

Page | 80 www.ijsart.com

of electric power sector of the country in general and financial performance of NTPC Ltd. in particular.

Dhruti G Jani (2020) A study of financial performance of NTPC ltd using dupont analysis Profit is a measure of the company's efficiency and effectiveness (Pandey). Profit maximization is now generally acceptable goal of any enterprise irrespective of its ownership. Economics & Financial literature has accepted rate of return or profitability or ROE as a vital indicator to gauge efficiency of the firm. The objective of this paper was to evaluate and analyse financial performance of NTPC Ltd. after disinvestment during the period from 2011-12 to 2019-20 using three step and five step DuPont model. National Thermal Power Corporation was disinvested in the year 2009-10 by minority disinvestment method (offer for sale). The results suggests that ROE was high in initial years. Equity multiplier is the most stable factor within the DuPont framework while other factors were fluctuating which indicates that NTPC had less financial leverage in initial years of the study period.

Praveen Kumar (2023) analysis of financial strength of national thermal power corporation limited (NTPC ltd) Trade proprietors, corporate officials, speculators, and loan specialists are all stressed around a company's money related steadiness, which can be measured in three ways: benefit, liquidity, and dissolvability. Productivity surveys a company's capacity to deliver positive net wage in connection to deals or venture, though liquidity evaluates its capacity to meet shortterm commitments by using its accessible assets successfully. Viable liquidity administration is basic for accomplishing short-term dissolvability destinations, which are basic for in general money related administration. As a result, the reason of this consider is to examine the liquidity execution of the country's electric control division, with a center on the monetary execution of NTPC Ltd, which is imperative both scholastically and essentially.

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Page | 81 www.ijsart.com