



**A STUDY ON MEASURING THE FINANCIAL PERFORMANCE OF SELECTED MAHARATNA AND NAVRATNA COMPANIES: MINING AND MINERAL SECTOR IN INDIA**

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**ABSTRACT**

Mining and Mineral Industry play a vital role in development of any country. In this research paper the attempt is made to study the financial performance of two Public Sector Enterprise connected in the business of Mining and Mineral Industry i.e. Coal India and NMDC with the special reference of profitability and liquidity. The research study covers the five-year period of both units. Portability ratio is measured in terms of PBTM, GRP, NPR, RONW and ROCE. Liquidity ratio is measured in the term of Current Ratio, Quick Ratio, ITR, DPR and ERR for the time period of 2015 to 2019. It is said from the research that profitability and liquidity position of NMDC is better than Coal India.

**KEYWORDS :** PBTM, Gross Profit (GP), Net Profit (NP), RONW, ROCE, Current Ratio, Quick Ratio, ITR, DPR and ERR.

**INTRODUCTION:**

India is the third largest producer of Coal in the world. Mining and Mineral Sector is contributing for the development of the economy. In India Coal is considered the black gold. This is widely used by the power industry for the generation of electricity. Mining and Mineral Sector has the strong and large forward and backward linkage in the term of product flow and the income generation. In this research we have taken Coal India and NMDC companies which related to Mining and Mineral Sector which come under the Public Sector Enterprise of the Central Government. Government has granted the status of Maharatna to Coal India and Navratana to NMDC. However, the Mining and Mineral Sector has contributed for the economic development of the nation. There for the financial performance of the companies is vital for the development of the country. Profitability and Liquidity analysis of Coal India and NMDC could play a significant role in this regard.

**Review Of Literature:**

(Gupta & Jain, n.d.) conducted a study on Growth and Profitability Analysis of Selected IT Companies in terms of ratios over a period of five years. The study mainly concluded there are significant difference between the companies in Operating Profit Ratio and Return on Capital Employed Ratio and there is no significant difference between the companies in Net Profit Ratio, Gross Profit Ratio, and Return on Net Worth Ratio.

(Koundal, 2012) made an attempt to analyse the efficiency and profitability of the Indian banks. He categorised the banks in terms of number of employees, business per employees, deposits per employee, advances per employee, bank assets size, non-performing assets etc. The main conclusion are as follows foreign sector bank had been more efficient, small banks are globally efficient and larger banks are locally efficient.

**3. Research Methodology:**

**3.1 Objectives Of The Study**

1. To analyzed liquidity position of selected Companies.
2. To study profitability of selected Companies.
3. To make suggestions of improvement of financial soundness.

**3.2 Hypothesis Of The Study**

- H<sub>0</sub>1: There is no significant difference in PBTM of Coal India and NMDC.  
H<sub>0</sub>2: There is no significant difference in Gross Profit of Coal India. and NMDC.

- H<sub>0</sub>3: There is no significant difference in Net Profit of Coal India. and NMDC  
H<sub>0</sub>4: There is no significant difference in RONW of Coal India and NMDC.  
H<sub>0</sub>5: There is no significant difference in ROCE of Coal India and NMDC.  
H<sub>0</sub>6: There is no significant difference in Current Ratio of Coal India and NMDC.  
H<sub>0</sub>7: There is no significant difference in Quick ratio of Coal India and NMDC.  
H<sub>0</sub>8: There is no significant difference in Inventory turnover ratio of Coal India and NMDC.

**3.3 Sampling Plan:**

Mining & Minerals Sector is very wide as the researcher as selected only two companies. Namely COAL INDIA and NMDC for the present research paper, so that the research study can be completed in time.

**3.4 Period Of Data Collection:-**

The time period for data collection is for five years i.e is from 2015 to 2019.the logic for selecting this time duration is complete available require data for the said time period.

**3.5 Sources Of Data Collection:-**

The present research study is based purely on secondary data. The secondary data has been collected from publish annual report of selected companies.

**3.6 Techniques Of Data Collection:**

Ratio analysis is the techniques apply for the present research paper. Basically, too ratios have been calculated.  
A. Profitability Ratio  
B. Liquidity Ratio

**3.7 Analysis And Interpretation Data: -**

Require data has been collected from for publish annual reports of selected companies. Collected have been tabulated in suitable tables and data presented in the tables has been analyzed and interpreted by applying ratio analysis. Mean and S.D have been calculated. Hypotheses have been tested by applying F-Test.

**4. Analysis And Interpretation Of Data:**

**Table :1 Profitability Ratios of Coal India and NMDC Ltd with F-Value**

YEAR	2015	2016	2017	2018	2019	Mean	S. D	F-value	TV	Ho/H1
<b>PBTM</b>										

Coal India	29.11	27.48	18.42	12.49	27.24	22.95	51.70	0.33	0.15	H1
NMDC	79.05	69.79	48.63	53.20	59.23	61.98	153.81			
<b>GP</b>										
Coal India	32.25	23.09	22.20	16.23	30.71	24.90	43.40	0.33	0.15	H1
NMDC	80.28	66.63	50.79	55.38	61.49	62.92	130.31			
<b>NP</b>										
Coal India	18.51	18.29	11.83	8.17	17.54	14.87	21.55	0.24	0.15	H1
NMDC	51.97	46.90	29.32	32.76	38.19	39.83	90.12			
<b>RONW</b>										
Coal India	34.01	40.95	37.84	35.37	66.00	42.83	174.68	10.11	6.39	H1
NMDC	19.86	10.05	11.49	15.62	17.88	14.98	17.28			
<b>ROCE</b>										
Coal India	16.71	17.51	20.12	14.54	31.52	20.08	44.88	1.06	6.39	H0
NMDC	19.77	9.99	18.65	24.22	27.09	19.94	42.53			

Sources: Annual Report of Coal India and NMDC from 2015 to 2019.

Above table shows that

1. PBTM was ranging from 18.42% to highest 29.11% in Coal India and 48.63% to 79.05% in NMDC during 2015-2019. Mean of PBTM of NMDC is higher than Coal India.
2. GP (Gross Profit) was ranging from 16.23% to highest 32.25% in Coal India and 50.79% to 80.28% in NMDC during 2015-2019. Mean of GP of NMDC is higher than Coal India.
3. NP (Net Profit) was ranging from 8.17% to highest 18.51% in Coal India and 29.32% to 51.97% in NMDC during 2015-2019. Mean of NP of NMDC is higher than Coal India.
4. RONW was ranging from 34.01% to highest 66% in Coal India and 10.05% to 19.86% in NMDC during 2015-2019. Mean of RONW of Coal India is higher than NMDC.
5. ROCE was ranging from 14.54% to highest 31.52% in Coal India and 9.99% to 27.09% in NMDC during 2015-2019. Mean of ROCE of Coal India is higher than NMDC.

**Testing Of Hypothesis:-**

According to F-Test, H<sub>0</sub> is accepted for ROCE. According to F-Test H<sub>1</sub> is accepted for PBTM, GP, NP and RONW.

YEAR	2015	2016	2017	2018	2019	Mean	S. D	F-value	TV	H <sub>0</sub> /H <sub>1</sub>
<b>CR</b>										
Coal India	4.73	3.23	2.77	1.17	2.68	2.92	1.63	0.09	0.15	H0
NMDC	12.01	6.34	3.09	2.50	2.60	5.31	16.53			
<b>QR</b>										
Coal India	4.70	3.15	2.72	1.16	2.64	2.87	1.61	0.1	0.15	H0
NMDC	11.66	6.13	2.88	2.33	2.38	5.08	16.02			
<b>ITR</b>										
Coal India	6.64	1.09	4.24	17.04	30.46	11.89	143.52	9.58	6.38	H1
NMDC	17.86	10.14	16.35	20.32	18.24	16.58	14.98			
<b>DPR</b>										
Coal India	2.31	-4.3	14.81	-10.2	22.59	5.042	182.6	0.88	0.15	H1

NMDC	47.22	-44.01	49.29	64.26	63.6	36.072	2066.1			
<b>ERR</b>										
Coal India	2.36	-4.19	14.91	-9.99	22.78	5.174	182.58	0.1	0.15	H0
NMDC	48.52	-34.76	52.86	66.51	65.66	39.758	1797			

Sources: annual report of O.N.G.C and Oil India from 2015 to 2019.

Above table shows that

1. CR was ranging from 1.17 to highest 4.73 in Coal India and 2.50 to 12.01 in NMDC during 2015-2019. Mean of CR of NMDC is higher than Coal India.
2. QR was ranging from 1.16 to highest 4.70 in Coal India and 2.33 to 11.66 in NMDC during 2015-2019. Mean of QR of NMDC is higher than Coal India.
3. ITR was ranging from 1.09% to highest 30.46% in Coal India and 10.14% to 20.32% in NMDC during 2015-2019. Mean of ITR of NMDC is higher than Coal India.
4. DPR was ranging from (10.2) % to highest 22.59% in Coal India and (44.01) % to 63.6% in NMDC during 2015-2019. Mean of DPR of NMDC is higher than Coal India.
5. ERR was ranging from (4.19) % to highest 22.78% in Coal India and (34.76) % to 66.51% in NMDC during 2015-2019. Mean of ERR of NMDC is higher than Coal India. Mean of ERR of ONGC is higher than Oil India.

**Testing Of Hypothesis:-**

According to F-Test, H<sub>0</sub> is accepted for CR, QR, and ERR. According to F-Test, H<sub>1</sub> is accepted for ITR and DPR.

**5. Major Findings Of The Study:**

1. PBTM is higher in NMDC than Coal India during 2015 to 2019. Thus, there is upper trend of PBTM in NMDC than Coal India.
2. GP is higher in NMDC than Coal India during 2015 to 2019. Thus, there is upper trend of GP in NMDC than Coal India.
3. Net Profit is higher in NMDC than Coal India during 2015 to 2019. Thus, there is upper trend of NP in NMDC than Coal India.
4. RONW higher in Coal India than NMDC during 2015 to 2019. Thus, there is upward trend of RONW in Coal India than NMDC.
5. ROCE higher in Coal India than NMDC during 2016 and 2019. But higher in NMDC than Coal India during 2015, 2017 and 2018. Thus, there is mix trend of ROCE.
6. CR and QR is higher in NMDC than Coal India during 2015 to 2019. Thus there is upward trend of CR and QR in NMDC than Coal India.
7. ITR is higher in Coal India than NMDC during 2019. But higher in NMDC than Coal India during 2015 to 2018. Thus, there is mix trend of ITR.
8. DPR is higher in Coal India than NMDC during 2016. But higher in NMDC than Coal India during 2015, 2017 to 2019. Thus, there is mix trend of DPR.
9. ERR is higher in Coal India than NMDC during 2016. But higher in NMDC than Coal India during 2015, 2017 to 2019. Thus, there is mix trend of ERR.

**6. Suggestion:**

1. There is need to improve the stability for PBTM in Coal India.
2. There is need to improve the stability for Gross Profit and Net Profit in Coal India.
3. There is need to improve the stability for RONW in Coal India
4. Coal India and NMDC needs to increase ROCE so that both companies can show upward trend.
5. CR of Coal India is less than ideal CR 2:1 during few years and in company has to make try to maintain an Ideal CR in future. NMDC has maintained the CR as per ideal CR.
6. QR of Coal India and NMDC has maintained as per the

ideal QR 1:1 during the study period.

7. ITR, DPR and ERR is less in Coal India as compared to NMDC and Coal India has to improve it.

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