

A STUDY OF RATIO ANALYSIS AT MANGAMPETA BARYTES**Dr.R.Neelaiah****Abstract**

Financial performance is the process of identifying the financial strengths and weaknesses of the firm. It is done by establishing relationships between the items of financial statements. The ratio analysis is the most powerful tool to analyze financial performance. In order to anticipate the future there is a need to understand the past. In order to better insight financial data it is useful to analyze a firm past performance & assess its present financial position. Hence the study is taken up to feedback the management about the financial health of the company. This techniques is similar to the times is statistics, Wherein we study the trend of different items in the financial states by calculating the trend percentages either by taking a fixed based year of chain base year this technique provides useful analysis and will be effective only when we have data relating to five or more consecutive years. We can calculate the trend ratios either from absolute data given for trend percentages of the ratio calculated or from the given data. The financial statement may be prepared and analyzed by computing trend of series of information. This method determines the direction upwards or down wards and involves the computation of the percentage relationship that each statement item bears to the same item in base year. The present study reveals that the overall Performance of APMDC.

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INTRODUCTION

Financial performance is the process of Identifying the financial strength and weakness of firm. It is done for establishing relationship between the items of financial statement. The trend analysis is the powerful tool for analyze financial performance in order to anticipate the future. It is need to understand the past in order to set better insight financial data.

Whether the finical position of firm is improving or deteriorating over the years. This is made possible by use of Trend analysis , the significant of trend analysis of ratio lies in the fact that the analysis can known the direction of movement , that is whether the movement is favorable or unfavorable.

Financial statements play very important role in setting in the frame work of managerial decisions .They throw light for understanding the liquidity, solvency, profitability & operational efficiency of the business concern. No meaningful conclusions can be drawn from the financial statements alone however the information provided in financial statements is of immense use when it is analyzed & Interpreted. There are various methods or techniques used in analyzing the financial statements. The following are some of the important techniques used in financial analysis.

HISTORICAL PERSPECTIVE

The Andhra Pradesh Mineral Development Corporation Limited (APMDC) (formerly The Andhra Pradesh Mining Corporation Limited) was incorporated in the year 1961 as a wholly State Owned Undertaking of Govt. of Andhra Pradesh, having its registered office at 8-3-945, 2nd floor, Pancom Business center, Ameerpet, Hyderabad with the main objectives of the development of mineral resources of the state including exploration, exploitation, conservation, processing, beneficiation, conversion into value added products, promotion of mineral based industries and sale ores mined. The corporation is the largest producer and exporter of Barytes in India. It contributes 95% of the production in the country. APMDC maintains International standards in Barytes quality.

The Barytes deposit at Mangampeta in Kadapa District is the World's single largest deposit containing about 74 million tones of grey Barytes. The major applications of Barytes are for use in oil exploration and manufacture of barium chemicals. APMDC produces about 6 lakh tones per annum and capacities are available for increase in the production. APMDC also established grinding facilities in the vicinity of the mines and catering Barytes powder

requirements of ONGC and Oil India in priority sector. The deposit is well connected by all weather road and rail to the nearest major port at Chennai.

Mangampeta is a small village located on the side of the road leading from Kadapa to Chennai in AP. The village is a shotrium village given to some Brahmin families by the malty dynasty kings who ruled the area. Even though all the lands belong to the shotriumdars, other caste people were also living in a co-operative manner by irrigating these fields either as laborers or kouldars.

In the year 1970 Geological Survey of India (GSI), the pioneering agency in surveying for minerals conducted a preliminary survey. Later followed it up by gravity and magnetic surveys in the year 1971-73 and later detailed survey was conducted till 1978. During this survey, the GSI found that the Barytes deposit occurred in the form of two lensoid bodies of which northern lens is biggest. The extensive surveys and detailed borehole drilling and analysis of data have all confirmed the enormity of the deposit.

The GSI at the end of their investigations found that the Mangampet village endowed with about 74 million tones of the World's largest and thickest deposit containing of about 28% of the known Barytes deposits of the world. With this find AP accounted for about 95% of the Barytes deposits of India. At the time of discovering the huge potentiality of Mangampet deposit the global oil search had reached its pinnacle and the Barytes being the important constituent of the drilling mud. Mangampet attained worldwide recognition for its huge and high quality deposit.

The AP Government during the year 1978 took a policy decision to restrict mining at Mangampet only under the aegis of a Government undertaking namely APMDC. Accordingly the whole mineral bearing area slowly started coming into the fold of APMDC and now the entire mineral bearing area is under the control of the Government owned company APMDC. With the advent of APMDC the job opportunities increased many fold with good salary and benefit to locals. To get one ton of Barytes, six times of the waste/overburden has to be removed. During these years of Mine development, Mangampet and its surrounding villages have also developed economically by getting jobs, contracts and other day today works connected to the mining and allied activities.

Huge quantity of water has to be baled out to continue mining operations and to produce to ore continuously without interruption. This water is being utilized by the villagers at on cost. The water is available all round the year thus, facilitating activity in all seasons. There certainly was a marked improvement in the living standards of villagers.

After all these developments, the village is on the verge of losing its very identity. With the huge expansion of mine, the village is facing problems of pollution and is lying in the statutory danger area. Even large areas of agricultural lands are being acquired for mining purposes. Thus, the very existence of Mangampet village in its original shape is in jeopardy. In view of this, the village is being evacuated and rehabilitated at different place. APMDC Ltd. has provided all the basic facilities such as electricity, roads, water etc., at the new site. It is also providing the bus facility for the school going children of the villagers. Hence, APMDC is playing a vital role in the community development also.

The Mangampet Barytes project is being headed by the Project Manager, who in turn is helped regularly by different departmental heads such as Mining, geology .Survey, Accounts, Electrical, Plant etc. in excavation and sale of Barytes. The departmental heads in turn are helped by their subordinate staff. The Project Manager is the executive authority who receives instructions on policy decisions from Vice Chairman and Managing Director from Hyderabad.

The Corporation on its own carried on exploration and exploitation of various minerals like iron ore, Barytes, asbestos, apatite .quartz, clay, limestone, copper .decorative stones etc., and in joint sector marble, graphite and thus contributed significantly to the development of the State's mineral resource.The industrial policy of Andhra Pradesh, 1995, envisages development of mineral industry with private participation and encourages joint sector operation with APMDC. The role of APMDC is identification of best technology and attracts investment for development of Mineral wealth from all over the world for participation in joint sector for development of certain valuable minerals like bauxite, heavy mineral beach sands, Barytes etc.

OBJECTIVES OF STUDY

- To Examine the financial performance of the company.
- To highlight the short comings in the area of finance with the aid of trend analysis, Comparative analysis's to put for recommendation with a view to increase efficiency of the company; and

- To analyze, interprets and give suggestions to improve the operational efficiency of the enterprise by comparing the financial statements.

METHODOLOGY

Exploratory research design has been adopted in the present study. Exploratory research design largely interprets the already available Information; it makes use of secondary data and lays emphasis on analysis and interpretation of the existing and available Information.

SOURCES OF DATA

Secondary data

Secondary data were collected from Annual reports, Budgets, and other statements provided by the finance department of APMDC Ltd.

TOOLS OF ANALYSIS

To analyze the data acquired from the secondary sources, the following financial tools are used

- Ratio analysis
- Comparative finance sheet analysis
- Common size statements

ANALYSIS AND INTERPRETATION OF DATA

TREND PERCENTAGES ANALYSIS

This method of analysis studies the percentages relationship that each item of the financial statement bears to the same item in the base year. Through this analysis the analyst seeks to review changes that have taken place in individual categories there in form year to year and over the years. Thus, trend analysis can take from of year to year comparisons, index numbers, trend series and trend ratio.

Table No.1, STATEMENT SHOWING TREND ANALYSIS

BALANCE SHEET							
Rs.in millions							
PARTICULARS	SNO.	2015	2016	2017	2015	2016	2017
I. Share holders funds							
A. Capital	1	63.06	63.06	63.06	100	100	100
B .Reserve and surplus	2	332.81	351.60	471.79	100	105.65	141.76
C. Loans, funds and secured loans	3	10.91	-	-	100	0.00	0.00
D. Differed govt grants		0.04051	0.03724	0.03500	100	91.93	86.40
Total source of funds		406.82	414.71	534.89	100	101.94	131.48
II. Current liabilities							
A. Liabilities		171.56	178.32	198.44	100	103.94	115.67
B. Provisions		75.51	101.56	186.16	100	134.50	246.54
TOTAL LIABILITIES		653.89	694.58	919.49	100	106.22	140.62
Fixed assets	4	33.12	30.58	32.27	100	92.33	97.43
Capital work in progress		0.004	0.0353	0.0339	100	882.50	847.50
Investments	5	19.75	27.84	24.84	100	140.96	125.77
Current assets ,loan & advances							
Inventories	6	46.71	17.71	22.80	100	37.91	48.81
Sundry debtors	7	37.95	128.76	66.65	100	339.29	175.63
Cash& back balance	8	366.94	332.81	539.23	100	90.70	146.95
Other current assets	9	19.50	12.66	15.64	100	64.92	80.21
Loans& advances	10	129.93	148.77	218.01	100	114.50	167.79
TOTAL ASSETS		653.89	694.58	919.49	100	106.22	140.62

*Trend percentage base year 2006

Table No-2, STATEMENT SHOWING TREND ANALYSIS

BALANCE SHEET							
Rs.in millions							
PARTICULARS	SNO	2017	2018	2019	2017	2018	2019
I. Share holders funds							
A. Capital	1	63.06	63.06	63.06	100	100	100
B .Reserve and surplus	2	332.81	522.02	787.20	100	156.85	236.53
C. Loans, funds and secured loans	3	10.91	18.35	12.57	100	-168.19	115.22-
D. Differed govt grants		0.0405	0.03254	0.03052	100	80.33	75.34
Total source of funds		406.82	603.62	863.49	100	148.38	212.25
II. Current liabilities							
A. Liabilities		171.56	248.87	226.41	100	145.06	131.97
B. Provisions		75.51	199.68	306.42	100	264.44	405.80
TOTAL LIABILITIES		653.89	1052.01	1396.32	100	160.88	213.54
Fixed assets	4	33.12	66.06	72.52	100	199.46	218.96
Capital work in progress		0.004	-	0.471	100	0.00	11775.00
Investments	5	19.75	12.84	1.59	100	65.01	8.05
Current assets ,loan & advances							
Inventories	6	46.71	25.67	77.24	100	54.96	165.36
Sundry debtors	7	37.95	65.17	96.71	100	171.73	254.84
Cash& back balance	8	366.94	668.46	750.06	100	182.17	204.41
Other current assets	9	19.50	27.09	32.39	100	138.92	166.10
Loans& advances	10	129.93	186.72	365.35	100	143.71	281.19
TOTAL ASSETS		653.89	1052.01	1396.32	100	160.88	213.54

*Trend percentage base year 2006

Table 1 and 2 reveal that the source of funds, current liabilities, fixed assets and current assets was in increase trend during the year's 2006 to 2010.

Table No 3, Profit and loss Trent analysis

PRTICULARS	YEARS				
	2015	2016	2017	2018	2019
Net sales	363.47	414.68	597.36	583.49	894.6
Profit before tax	35.34	32.60	209.81	197.24	399.28
Fixed assets	33.12	30.58	32.27	66.06	72.52
Trend Analysis (in percentage)					
Net sales	100	114.09	164.35	160.53	246.13
Profit before tax	100	92.25	593.69	558.12	1129.82
Fixed assets	100	92.33	97.43	199.46	218.96

The trend percentages indicate that 2019 sales are 2.46 times 2015 sales, a rise of 246 percent, Profit before tax kept nearly pace with sales rising by 400 percent. Fixed assets increased less slowly relative to both sales and profit by 219 percent over the same period.

VERTICAL ANALYSIS

Vertical analysis is the proportional expression, of each item of a financial statement to statement total , the results of vertical analysis are presented in the form of common-size-statements in which all the elements within each statement are expressed as percentages of some common number and always add up to 100. The items in the profit and loss account are usually expressed as percentages of sales, while the balance sheet items are given as percentages of total shareholders' funds and liabilities or of total. Vertical analysis help in making comparison of companies that differ in size since the financial statement are expressed in comparable common-size format a comparison of common size statements for several years may reveal important changes in the components from one year to the next.

Table No. 4, Common-size Profit and loss accounts

Rs. in millions

PARTICULARS	YEARS			percentages		
	2017	2018	2019	2017	2018	2019
Net sales and other Income	410.84	412.68	647.73	100	100	100
Expenses	367.34	381.18	445.13	89.41	92.37	68.72
Profit before tax	43.50	31.50	202.60	10.59	7.63	31.28
Taxation for the year	11.18	10.62	75.17	2.72	2.57	11.61
Profit after tax	32.32	20.88	127.43	7.87	5.06	19.67

Common-size Profit and loss accounts

Rs. in millions

PARTICULARS	YEARS		percentages	
	2018	2019	2018	2019
Net sales and other Income	647.88	966.46	100	100
Expenses	470.14	677.88	72.57	70.14
Profit before tax	177.74	288.58	27.43	29.86
Taxation for the year	124.93	110.23	19.28	11.41
Profit after tax	52.81	178.35	8.15	18.45

Table 4, shows the common size profit and loss account of APMDC for 2015-19. There are major changes in sales and other income, expenses, profit before tax, taxes for the year and profit after tax.

HORIZONTAL ANALYSIS

Financial statements present comparative information for the current year and the previous year. Simple approach to financial statement analysis, known as horizontal analysis, is to calculate amount of changes and percentage changes from the previous year to the current year. While an amount changes in itself may mean something, converting amount. Changes to percentages are more useful in appreciating the order of magnitude of change.

COMPARATIVE BALANCE SHEET

This statement prepared on two or more different dates can be used for comparing assets and to find out any increase or decrease in these items. This facilitates the comparison of Graph No of two or more periods and provide necessary information which may be useful in forming an opinion regarding the financial condition as well as progressive outlook of the concern.

Table No.5, Comparative balance sheet for year 2015 and 2016

BALANCE SHEET					
					Rs.in millions
PARTICULARS	SNO	2015	2016	Increase/ decrease	Percentage of Incr/Decr
I. Share holders funds					
A. Capital	1	63.06	63.06	0.0	0.0
B .Reserve and surplus	2	332.81	351.60	18.79	5.65
C. Loans, funds and secured loans	3	10.91	-	-10.91	-100
D. Differed govt grants		0.04051	0.03724	-0.00327	-8.07
Total source of funds		406.82	414.71	7.89	1.94
II. Current liabilities					
A. Liabilities		171.56	178.32	6.76	3.94
B. Provisions		75.51	101.56	26.05	34.50
TOTAL LIABILITIES		653.89	694.58	40.69	6.22
Fixed assets	4	33.12	30.58	-2.54	-7.67
Capital work in progress		0.004	0.0353	0.0313	782.50
Investments	5	19.75	27.84	8.09	40.96
Current assets ,loan & advances					
Inventories	6	46.71	17.71	-29	-62.09
Sundry debtors	7	37.95	128.76	90.81	239.29
Cash& back balance	8	366.94	332.81	-34.13	-9.30
Other current assets	9	19.50	12.66	-6.84	-35.08
Loans& advances	10	129.93	148.77	18.84	14.50
TOTAL ASSETS		653.89	694.58	40.69	6.22

Table No.6, Comparative balance sheet as on year 2016-2017

BALANCE SHEET					
Rs.in millions					
PARTICULARS	SNO.	2016	2017	Increase/dec rease	Percentage of Incr/Decr
I. Share holders funds					
A. Capital	1	63.06	63.06	0.0	0.0
B .Reserve and surplus	2	351.60	471.79	120.19	34.18
C. Loans, funds and secured loans	3	-	-	0	
D. Differed govt grants		0.03724	0.03500	-0.00224	-6.02
Total source of funds		414.71	534.89	120.18	28.98
II. Current liabilities					
A. Liabilities		178.32	198.44	20.12	11.28
B. Provisions		101.56	186.16	84.6	83.30
TOTAL LIABILITIES		694.58	919.49	224.91	32.38
Fixed assets					
Capital work in progress	4	30.58	32.27	1.69	5.53
Investments	5	27.84	24.84	-3	-10.78
Current assets ,loan & advances					
Inventories	6	17.71	22.80	5.09	28.74
Sundry debtors	7	128.76	66.65	-62.11	-48.24
Cash& back balance	8	332.81	539.23	206.42	62.02
Other current assets	9	12.66	15.64	2.98	23.54
Loans& advances	10	148.77	218.01	69.24	46.54
TOTAL ASSETS		694.58	919.49	224.91	32.38

Table No.8, Comparative balance sheet as on year 2017-2018

BALANCE SHEET					
Rs.in millions					
PARTICULARS	SNO.	2017	2018	Increase/dec rease	Percentage of Incr/Decr
I. Share holders funds					
A. Capital	1	63.06	63.06	0.0	0.0
B .Reserve and surplus	2	471.79	522.02	50.23	10.65
C. Loans, funds and secured loans	3	-	18.35	18.35	-
D. Differed govt grants		0.03500	0.03254	-0.00246	-7.03
Total source of funds		534.89	603.62	68.73	12.85
ii. Current liabilities					
A. Liabilities		198.44	248.87	50.43	25.41
B. Provisions		186.16	199.68	13.52	7.26
TOTAL LIABILITIES		919.49	1052.01	132.52	14.41
Fixed assets					
Capital work in progress	4	32.27	66.06	33.79	104.71
Investments		0.0339	-	-0.0339	-100
Investments	5	24.84	12.84	-12	-48.31
Current assets ,loan & advances					
Inventories	6	22.80	25.67	2.87	12.59
Sundry debtors	7	66.65	65.17	-1.48	-2.22
Cash& back balance	8	539.23	668.46	129.23	23.97
Other current assets	9	15.64	27.09	11.45	73.21
Loans& advances	10	218.01	186.72	-31.29	-14.35
TOTAL ASSETS		919.49	1052.01	132.52	14.41

Table No.9, Comparative balance sheet as on year 2018 -2019

BALANCE SHEET					
					Rs.in millions
PARTICULARS	SNO	2018	2019	Increase/decrease	Percentage of Incr/Decr
I. SHARE HOLDERS FUNDS					
a. Capital	1	63.06	63.06	0.0	0.0
b .Reserve and surplus	2	522.02	787.20	265.18	50.80
c. Loans, funds and secured loans	3	18.35	12.57	-5.78	-31.50
d. Differed govt grants		0.03254	0.03052	-0.00202	-6.21
Total source of funds		603.62	863.49	259.87	43.05
II. CURRENT LIABILITIES					
a. Liabilities		248.87	226.41	-22.46	-9.02
b. Provisions		199.68	306.42	106.74	53.46
TOTAL LIABILITIES		1052.01	1396.32	344.31	32.73
FIXED ASSETS					
Capital work in progress	4	66.06	72.52	6.46	9.78
Investments		-	0.471	0.471	-
	5	12.84	1.59	-11.25	-87.62
CURRENT ASSETS ,LOAN & ADVANCES					
Inventories	6	25.67	77.24	51.57	200.90
Sundry debtors	7	65.17	96.71	31.54	48.40
Cash& bank balance	8	668.46	750.06	81.6	12.21
Other current assets	9	27.09	32.39	5.3	19.56
Loans& advances	10	186.72	365.35	178.63	95.67
TOTAL ASSETS		1052.01	1396.32	344.31	32.73

The Comparative balance sheets state that there is no change in during the 2006 to 2010, Differed Govt. grants are continuously decreased from the year 2015-19

RATIO ANALYSIS

Ratio analysis is a widely used tool of a financial analysis it is defined as the systematic use of ratio interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial conditions can be determined.

CURRENT RATIO

This is the ratio of current assets liabilities. It is widely used indicated of company's ability to pay its debts in the short term. It shows the Amount of current assets a company has per rupee of current liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Table No. 10, Current ratio's for the year 2015-19

Rs.in millions

Years	Current assets	Current liabilities	Ratio
2015	601.03	247.07	2.43
2016	640.71	279.88	2.29
2017	863.33	384.6	2.25
2018	973.11	448.55	2.17
2019	862.33	532.83	1.62

It is observed that during the years 2015, 2016, 2017 and 2018 current ratio is said to be satisfactory, in the year 2016 current ratio was below the standard i.e. 1.62.

PROPRIETARY RATIO

The share holder's funds are compared with the total assets of the company. This ratio indicates general financial strength of the concern. It is a test of the soundness of the financial

structure of the concern. It is the preparation of shareholders funds in the investment of the business

$$\text{Proprietary ratio} = \frac{\text{Share holders fund}}{\text{Total assets}} \times 100$$

Table No. 11, Proprietary ratios for the year 2015-19

Rs. in millions

Years	Share holders fund	Total assets	Ratio
2015	406.03	653.89	62.09
2016	414.71	694.58	59.71
2017	534.89	919.5	58.17
2018	603.62	1052.01	57.38
2019	863.49	1396.32	61.84

The Propriety ratio was 62.09 in the year 2015; it was decreased to 57.38 and increased to 61.84 in the year 2019.

SUGGESTIONS

1. The manufacturing expenses of the APMDC should be reduced.
2. The company should maintain the working capital properly.
3. The finance manager should concentrate on the control of expenses then only they can earn profit.
4. The company has to develop its mining system by adopting new technology in order to improve the output.
5. The company can utilize the waste material for the input of barytes.
6. The company should manage its fixed assets efficiently.
7. Working capital is not efficiently utilized for enhancement of sales. Oversized working capital should either be trimmed or overall attempted should be made to increase the turnover.
8. Reduce the bad debts on credit sales.

CONCLUSION

The study reveals that the overall Performance of APMDC was not satisfactory and the company should improve its liquidity & profitability by increasing its investments in current assets and by reducing the operating expenses of the company.