



An evaluation of financial performance of DISCOMS in Andhra Pradesh

(A comparative study of APEPDCL and APSPDCL)

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ABSTRACT: The paper provides an analytical study on “An Evaluation of Financial Performance of Discoms In Andhra Pradesh” from the perspective of liquidity and profitability using the technique of ratio analysis. Liquidity is the ability to meet the short term financial obligations, which is important for any organisation. Profitability is the parameter to examine whether the organisation is utilizing its financial resources to optimum level or not. So an attempt is made in this paper to analyse the liquidity and profitability positions of APEPDCL and APSPDCL. On the basis of present study it is found out that the DISCOMS in AP have been under the liquidity crunch with falling liquidity cushion.

Key words: liquidity, profitability, APEPDCL, APSPDCL, DISCOMS, financial performance.

Introduction

Financial Statements are the only means of providing data base regarding operational results and financial position of a company. These statements merely contains financial data about company events which do not reveal any significant conclusions such as efficiency of management, strength and weakness of the firm, index of future progress etc. Therefore meaning and significance are not known till their user does some analysis and interpret them for their specific purpose. Financial analysis is a multipurpose and multi-dimensional technique which involves a systematic study for a certain period. The use of technique is an art which requires pertinent knowledge, experience and intuition based on the data analysis.

Ratio analysis is a powerful tool of financial analysis. Ratios are relationship expressed in mathematical terms between figures which are connected in some manner. For the purpose of analysis ratios are grouped into 4 types namely liquidity ratios, leverage ratios, turnover ratios and profitability ratios.

Objectives of the study:

- To examine the financial performance of APEPDCL and APSPDCL by analysing the liquidity and profitability position during the period of study i.e, 2004-05 to 2015-16.
- To suggest various measures to strengthen the liquidity and profitability position of selected organisations.



Research Methodology

- Source of data: The main source of data in the present study is secondary, which has been collected from the audited annual financial reports of APEPDCL and APSPDCL.
- Sample units: APEPDCL and APSPDCL, the two power distribution companies in the state of Andhra Pradesh.
- Statistical techniques: The data has been analysed using statistical tools like ratios, trends, correlation, tables and graphs.

Data Analysis and Interpretation:

The Current Ratio: Table-1 presents the current ratio of APEPDCL and APSPDCL for the period from 2004-05 to 2015-16. As evident from the table

the current assets of the APEPDCL, which amounted to Rs 706.98 crore in 2004-05 increased to RS 5,174.29 crore in 2015-16, with a compound annual growth rate of 18.04 per cent. This is despite wide intermittent fluctuations during the years 2006-07, 2007-08 and 2012-13 under consideration. On the other hand the current liabilities of the company went up from Rs 649.83 crore in 2004-05 to Rs 4628.46 crore in 2015-16 with a compound annual growth rate of 17.7 per cent. During this period the current liabilities bulged up during the year 2012-13 and experienced a drastic decrease during 2013-14. Over the years under review the current ratio of the company ranged between a lowest of 0.74 in the year 2012-13 and a highest of 2.51 in the year 2010-11 with an average of 1.49.

Table-1: Current Ratio of APEPDCL and APSPDCL (Rupees in Crores)

Year	APEPDCL			APSPDCL		
	Current Assets	Current Liabilities	Ratio	Current Assets	Current Liabilities	Ratio
2004-05	706.98	649.83	1.09	1085.26	869.99	1.25
2005-06	1174.27	802.59	1.46	1385.32	1217.25	1.14
2006-07	1002.31	896.23	1.12	1434.43	1186.9	1.21
2007-08	997.88	951.29	1.05	1560.64	1252.6	1.25
2008-09	2161.63	1177.86	1.84	3134.85	1680.49	1.87
2009-10	2722.55	1511.91	1.80	4136.16	1965.52	2.10
2010-11	4119.11	1639.70	2.51	5275.14	2629.17	2.01
2011-12	4670.33	2178.33	2.14	6711.99	5687.30	1.18
2012-13	4110.24	5532.53	0.74	3542.54	7339.98	0.48
2013-14	3678.52	2115.63	1.74	3095.11	3378.96	0.92
2014-15	3651.20	2848.95	1.28	4283.38	6060.12	0.71
2015-16	5174.29	4628.46	1.12	4331.90	12365.69	0.35
		Average	1.49			1.20
CAGR%	18.04	17.77	0.23	12.23	24.75	-10.06

Source: Annual Reports of APEPDCL & APSPDCL



Thus the analysis shows that the liquidity position of the company as reflected by the current ratio stands below the established standard and the satisfactory level, with the exception of the years 2010-11 and 2011-12 where the respective ratios stood at 2.51 and 2.14.

In the case of the APSPDCL the current assets of Rs 1085.26 crore in 2004-05 went up to Rs 4371.90 crore in 2015-16 with a compound annual growth rate of 12.23 per cent. No doubt, over the period the trend analysis reflects a drop down in the amount of current assets to Rs.3542.56 crore in 2012-13 and further to Rs.3095.11 in the year 2013-14. On the other hand the amount of current liabilities of the company have increased from Rs 869.99 crore in 2004-05 to Rs 12365.69 crore in 2015-16 registering a compound annual growth rate of 24.75 per cent. This is

despite the wide intermittent fluctuations over the period under reference. The current ratio of the company ranged between the lowest of 0.35 in the year 2015-16 and the highest of 2.10 times in the year 2009-10. The analysis on the comparative lines drives home the point that relatively the liquidity position of the APEPDCL stands higher than that of the APSPDCL. This is also evident from the fact that the average current ratio of the former stands at 1.49 as against 1.20 of the latter. Further, the growth rate in the current liabilities of the APEPDCL stands lower (17.7 per cent) than that of the current assets (18.04 per cent), whereas in the case of the APSPDCL the growth rate in the amount of current liabilities (24.75 per cent) stands far above that of the current assets (12.23 per cent) indicating lower liquidity and the liquidity crunch.

Inference: APEPDCL showed positive growth over the years and APSPDCL showed negative growth in the current ratio.

Trend of	Trend line	Trend(2025)
APEPDCL	$\text{Ratio}(\text{year}) = \text{year} * 0.011001 + 1.375458$	1.650483
APSPDCL	$\text{Ratio}(\text{year}) = \text{year} * (-0.07611) + 2.003509$	1.728484

Inference: From the above trend analysis of the current ratio relatively of the two companies under study,, the APSPDCL has highest trend value which is 1.728484 rather than APEPDCL which is 1.650483. This apparently indicates that the APSPDCL will have a greater value of the current ratio by the year 2025.

Based on the t- test analysis, the difference between APEPDCL and APSPDCL is not significant over the

years under review with respect to the current ratio. APEPDCL is showing higher mean value than APSPDCL. From the correlation perspective, with respect to the current ratio, a Moderate correlation is observed between APEPDCL and APSPDCL .

The Quick or Acid-test Ratio

Table 2 presents the trend of the quick ratio of the APEPDCL and the APSPDCL during the years 2004-05 to 2015-16.



Table-2: Quick Ratio of APEPDCL and APSPDCL (Rupees in Crores)

Year	APEPDCL			APSPDCL		
	Liquid Assets	Current Liabilities	Ratio	Liquid Assets	Current Liabilities	Ratio
2004-05	679.01	649.83	1.04	1006.29	869.99	1.16
2005-06	1138.25	802.59	1.42	1280.7	1217.25	1.05
2006-07	935.71	896.23	1.04	1329.75	1186.9	1.12
2007-08	932.57	951.29	0.98	1452.04	1252.6	1.16
2008-09	2108.09	1177.86	1.79	3032.4	1680.49	1.80
2009-10	2688.25	1511.91	1.78	4012.97	1965.52	2.04
2010-11	4073.25	1639.7	2.48	5174.07	2629.17	1.97
2011-12	4610.84	2178.33	2.12	6591.32	5687.3	1.16
2012-13	4009.06	5532.53	0.72	3405.65	7339.98	0.46
2013-14	3569.92	2115.63	1.69	2936.18	3378.96	0.87
2014-15	3494.47	2848.95	1.23	4098.85	6060.02	0.68
2015-16	4990.01	4628.46	1.08	4273.72	12365.69	0.35
CAGR %	18.08	17.77	0.31	12.81	24.75	-09.50
	Average		1.45			1.15

Source: Annual Reports of APEPDCL & APSPDCL

It is evident from the table that the amount of liquid assets of the APEPDCL, which was Rs.679.01 in the year 2004-05, increased over the years, though with intermittent fluctuations to Rs.2688.25 crore in 2009-10 and stood at Rs.4990.01 crore in the year 2015-16. Thus, during the period of 2004-05 to 2015-16, the Liquid assets of the company registered a compound annual growth rate of 18.08 per cent. The current liabilities of the company also went up from Rs.649.83 crore in 2004-05 to Rs.1511.91 crore in 2009-10 and further to Rs.4628.46 crore in the year 2015-16 at a compound annual growth rate of 17.77 per cent. It could be noted that the liquid assets of the company recorded a growth rate above that of the current liabilities. The calculated quick ratio of the company was 1.04 in 2004-05 and crept up to 2.48 in 2010-11, but stood at 1.08 in 2015-16. During the period under reference the average quick ratio stands at 1.45. Thus the

quick ratio of the APEPDCL, though not found up to the standard, comparatively stood higher than that of the APSPDCL (average 1.15)

In the case of the APSPDCL the Liquid assets of Rs. 1006.29 crore in 2004-05 increased to Rs.4012.97 crore in 2009-10 and further looked up to Rs.4273.72 crore in 2015-16 registering a growth rate of 12.81 per cent of compound annual growth rate. On the other hand the current liabilities of the company increased at a phenomenal growth rate of 24.75 per cent over the years from Rs.869.99 crore in 2004-05 to Rs.12365.69 crore in 2015-16. It is evident from the fact that the quick ratio of the APSPDCL which was at 1.16 in 2004-05, no doubt increased to 2.04 in 2009-10, but markedly declined to 0.35 at an annual compound growth rate of -09.50 indicating the dilution in the liquidity scenario both absolutely and relatively.



Inference: With respect to the liquid or acid test ratio , the APEPDCL showed positive growth over the years and APSPDCL showed negative growth in the ratio.

Trend of	Trend line	Trend(2025)
APEPDCL	$\text{Ratio}(\text{year}) = \text{year} * 0.012421 + 1.317317$	1.627842
APSPDCL	$\text{Ratio}(\text{year}) = \text{year} * (-0.06839) + 1.869094$	0.159344

Inference: From the above table, the trend value of the Quick Ratio for APEPDCL (1.627842) is higher than that of APSPDCL (0.159344). This clearly indicates and unleashes the projection that APEPDCL will have higher value of the quick ratio by the year 2025.

Based on the t- test analysis, with respect to the Quick Ratio, the difference between APEPDCL and APSPDCL does not stand significant over the years . Further, the APSPDCL is showing higher mean value than APEPDCL. From the correlation perspective, a Moderate correlation is observed between APEPDCL and APSPDCL with respect to the cash to current liabilities ratio.

Table-3: Cash Ratio of APEPDCL and APSPDCL(Rupees in Crores)

Year	APEPDCL			APSPDCL		
	Cash & Bank	Current Liabilities	Ratio	Cash & Bank	Current Liabilities	Ratio
2004-05	63.7	649.83	0.10	80.1	869.99	0.09
2005-06	68.12	802.59	0.08	155.22	1217.25	0.13
2006-07	87.34	896.23	0.10	117.16	1186.9	0.10
2007-08	150.12	951.29	0.16	203.6	1252.6	0.16
2008-09	212.08	1177.86	0.18	603.67	1680.49	0.36
2009-10	142.74	1511.91	0.09	351.2	1965.52	0.18
2010-11	173.11	1639.7	0.11	478.5	2629.17	0.18
2011-12	174.59	2178.33	0.08	413.29	5687.3	0.07
2012-13	274.32	5532.53	0.05	324.6	7339.98	0.04
2013-14	283.21	2115.63	0.13	410.47	3378.96	0.12
2014-15	163.36	2848.95	0.06	491.67	6060.12	0.08
2015-16	224.55	4628.46	0.05	543.39	12365.69	0.04
CAGR %	11.07	17.77	-05.61	17.40	24.75	-06.53
	Average		0.10			0.13

Source: Annual Reports of APEPDCL & APSPDCL

Table-3 presents the cash ratio of the two DISCOMS- APEPDCL and APSPDCL- for the period from 2004-05 to 2015-16. The analysis of the data

presented in the table helps to gauge the cash cushion and the liquidity scenario of the two entities. As can be seen from the table, in the case of the APEPDCL,



the amount of cash and Bank balance was Rs.63.7 crore in 2004-05, which went up to Rs.142.74 crore in 2009-10 and further to Rs.283.21 crore in 2013-14 and finally stood at Rs.224.55 crore in 2015-16 registering an annual compound growth rate of 11.07 per cent as against the increase in current liabilities of 17.07 per cent. The cash to current liabilities ratio presented in the table reveals that it was 0.10 in 2004-05 and with intermittent marginal fluctuations, stood at 0.05 in the year 2015-16 registering an average cash ratio of 0.10 over the years under review.

With regard to the, APSPDCL, the cash balances relatively stood above those of the APEPDCL. It is evident that the cash balance of the company was Rs.80.1 crore in 2004-05, which went up to 478.5 crore in 2010-11 and further to Rs.543.39 crore in 2015-16 registering an annual compound growth rate of 17.40 per cent as against 24.75 per cent in the case of the current liabilities. The cash ratio of the APSPDCL, which was 0.09 in 2004-05, increased to 0.18 in 2009-10, but came down to 0.04 in 2015-16 recording an average cash ratio of 0.13 standing that of the average cash ratio of 0.10 in the case of the APEPDCL. But both the APEPDCL and the APSPDCL have recorded a negative annual compound growth rate of -05.61 per cent and -06.53 per cent in the average cash ratio over the period under study. Moreover, the analysis brings home the observation that in the case of both the DISCOMS under study, the cash ratios stand dissatisfactory and with negative growth, despite the increasing cash balances, largely because of the growing

amount of current liabilities over the years.

CASH POSITION RATIOS

Table 4(a) presents the ratio of the cash to total assets of the two DISCOMS over the period 2004-05 to 2015-16. It is evident from the table that the total assets of the APEPDCL, which was at Rs.1679.13 crores in 2004-05 increased to Rs.2852.84 crores in 2009-10 and further to 9119.27 crores in 2015-16 with an annual compound growth rate of 15.14 per cent as against the growth rate of 11.07 per cent in the case of the cash balance which increased from Rs.63.7 crores to Rs 224.55 crores during the same period with an annual compound growth rate of 11.07 per cent. Moreover, the ratio of cash to total assets of 0.04 in 2004-05 shoots up to 0.11 in 2007-08, but gradually dropped down to 0.02 in the year 2015-16 with a compound annual growth rate of -05.61 per cent. The average ratio of cash to total assets, over the period under review, stood at a low of 0.05.

In the case of the APSPDCL the scenario is similar but not distinct. A peep into the table reveals that the total assets of the APSPDCL, which amounted to Rs.2578.08 crores in 2004-05, stands the highest at Rs.10552.34 crores in 2011-12 and Rs.11927 crores in 2014-15 and finally stood at Rs.13677.86 crores in 2015-16 registering an annual compound growth rate of 14.92 per cent over the years.

**Table-4(a) : Cash to total assets ratio of DISCOMS (Rupees in Crores)**

Year	APEPDCL			APSPDCL		
	Cash	Total assets	Ratio	Cash	Total assets	Ratio
2004-05	63.7	1679.13	0.04	80.1	2578.08	0.03
2005-06	68.12	1471.25	0.05	155.22	3237.33	0.05
2006-07	87.34	1294.87	0.07	117.16	3729.18	0.03
2007-08	150.12	1427.85	0.11	203.6	4174.46	0.05
2008-09	212.08	2545.11	0.08	603.67	6136.64	0.10
2009-10	142.74	2852.84	0.05	351.2	7543.75	0.05
2010-11	173.11	4270.6	0.04	478.5	8806.71	0.05
2011-12	174.59	4418.24	0.04	413.29	10552.34	0.04
2012-13	274.32	6340.46	0.04	324.6	7725.27	0.04
2013-14	283.21	6247.45	0.05	410.47	8002.87	0.05
2014-15	163.36	6789.93	0.02	491.67	11927.98	0.04
2015-16	224.55	9119.27	0.02	543.39	13677.86	0.04
CAGR %	11.07	15.14	-5.61	17.30	14.92	2.43
	Ratio		0.05	Average		0.05

Source: Annual Reports of APEPDCL

It is as against the growth rate of 14.92 per cent in cash over the years under reference. Further, the ratio of cash to total assets Of the APSPDCL, which was at 0.03 in 2004-05 stood at the maximum of 0.10 in the year 2008-09 and finally at 0.04 in the year 2015-16 registering a growth rate of 2.43 per cent ,where the average ratio of cash to total assets stands similar to that of the APEPDCL at 0.05. Thus it is clear from the analysis that the cash reserves of both the DISCOMS under study have not increased in tune with the total assets and thus the cash to total assets ratio also experienced a marked decline over the years ,especially in the case of the APEPDCL when compared to that of the APSPDCL

Table 4(b) presents the cash to total sales ratio of the DISCOMS in the state of Andhra Pradesh during 2004-05 to 2015-16. As evident from the table the total sales of the first DISCOM-APEPDCL-which was Rs.1979.8 crores in the year 2004-05 consistently went up to Rs.3870.72 crores in 2009-10 and further to Rs.8433.21 crores in 2015-16 with a compound annual growth rate of 12.84 per cent over the period under reference. It is as against the growth in the cash at 11.07 per cent during the same period. An analysis of the cash to total sales ratio indicates that the ratio ranged between 0.03 in 2004-05 to 0.06 in 2012-13. During the period 2004-05 to 2015-16, the average of the cash to total sales ratio is worked out as 0.04



Table-4(b): Cash to total sales ratio of DISCOMS (Rupees in Crores)

Year	APEPDCL			APSPDCL		
	Cash	Total sales	Ratio	Cash	Total sales	Ratio
2004-05	63.7	1979.8	0.03	80.1	2357.38	0.03
2005-06	68.12	2106.17	0.03	155.22	2854.9	0.05
2006-07	87.34	2244.66	0.04	117.16	3067.99	0.03
2007-08	150.12	2568.85	0.06	203.6	3720.42	0.05
2008-09	212.08	3407.3	0.06	603.67	5113.13	0.10
2009-10	142.74	3870.72	0.04	351.2	5558.99	0.05
2010-11	173.11	4329.75	0.04	478.5	6525.44	0.05
2011-12	174.59	5350.37	0.03	413.29	7766.23	0.04
2012-13	274.32	4871.13	0.06	324.6	7908.12	0.04
2013-14	283.21	6033.81	0.05	410.47	9195.39	0.05
2014-15	163.36	7617.88	0.02	491.67	13173.62	0.04
2015-16	224.55	8433.21	0.03	543.39	14229.21	0.04
CAGR %	11.07	12.84	0	17.30	16.16	02.43
	Average		0.04	Average		0.05

Source: Annual Reports of APSPDCL & APEPDCL

On the other hand, with regard to the APSPDCL, the total sales, which was Rs.2357.38 crores in the year 2004-05, consistently increased to Rs.5558.99 crores in 2009-10 and further to Rs.14229.21 crores in 2015-16 with a compound annual growth rate of 16.16 per cent as against the growth in cash at 17.30 per cent. A further analysis of the data indicates that the cash to total sales ratio of the APSPDCL in 2004-05, which was at 0.03, marginally improved to 0.05 in 2009-10 and stood at

0.04 in 2015-16 registering a CAGR of 2.43 per cent. But the average ratio of cash to total sales stood at 0.05 over the period under review. The analysis drives home the observation that the cash to total sales ratio of the two DISCOMS have not been maintained at the satisfactory levels, despite the incessant increase in the value of sales over the review period. But it could be noted that relatively the cash to total sales ratio stood better in the case of APSPDCL as against the APEPDCL.

Inference: with respect to the cash to total sales ratio APEPDCL showed no growth over the years and APSPDCL showed positive growth in the ratio.

Trend of	Trend line	Trend(2025)
APEPDCL	Ratio(year)=year*(-0.00047)+0.045596	0.892746
APSPDCL	Ratio(year)=year*(-0.0011)+0.065742	0.038242



Inference: According to the trend APEPDCL could be expected to have a greater cash to total sales ratio by the year 2025.

PROFITABILITY RATIOS

Table-5: Net Profit as a per cent of total sales in APEPDCL and APSPDCL

(Rupees in Crores)

Year	APEPDCL			APSPDCL		
	Net Profit/Loss	Total Sales	Percent	Net Profit/Loss	Total Sales	Percent
2004-05	14.62	1979.8	0.74	-10.38	2357.38	-0.44
2005-06	28.9	2106.17	1.37	93.16	2854.90	3.26
2006-07	10.72	2244.66	0.48	56.92	3067.99	1.86
2007-08	-40.46	2568.85	1.58	82.10	3720.42	2.21
2008-09	20.62	3407.30	0.61	18.67	5113.13	0.37
2009-10	13.37	3870.72	0.35	5.68	5558.99	0.10
2010-11	12.81	4329.75	0.30	-1.29	6525.44	-0.02
2011-12	24.8	5350.37	0.46	5.67	7766.23	0.07
2012-13	-1680.55	4871.13	-34.50	-4672.91	7908.12	-59.09
2013-14	-135.85	6033.81	-2.25	-400.84	9195.39	-4.36
2014-15	-722.24	7617.88	-9.48	-1677.47	13173.62	-12.73
2015-16	-471.86	8433.21	-5.60	-3429.90	14229.21	-24.10
CAGR Average Ratio	-33.58	12.84	-4.09	- 62.15	16.16	-9.05

Source: Annual Reports of APSPDCL

Net Profit margin ratio:

Table 5 presents the net profit margin ratio of the APEPDCL and the APSPDCL during 2004-05 TO 2015-16. It is evident from the table the net profit of the APEPDCL, which was Rs. 14.62 crores in 2004-05 went up to Rs.28.9 crores in 2005-06 and stood at Rs.24.8 crores in 2011-12, but registered negative during the end four years under review ending with 2015-16. The APEPDCL registered a net loss of Rs.1680.55 crores in 2012-13 followed by Rs.135.85 crores in 2013-14, Rs.722.24 crores in 2014-15 and finally it is 471.86 crores in the year 2015-16. Thus, The amount of net profit of the APEPDCL increased negatively at a compound annual growth rate of -33.58

per cent during the period under reference 2004-05 to 2015-16, though the total sales registered a CAGR of 12.84 per cent during the same period, standing at Rs. 1979.8 crores in 2004-05 and Rs.8433.21 crores in 2015-16. Coming to the net profit margin ratio of APEPDCL, it was 0.74 per cent during 2004-05, registered highest at 1.58 per cent during 2007-08. But the net profit margin stooped down to -34.50 per cent during 2012-13 and stood at -5.60 per cent by the end of 2015-16. The analysis clearly shows that the net profit margin of the APEPDCL dwindled down at a rate -33.58 per cent, over the period under review, despite the marked increase in the amount of sales at a



compound annual growth rate of 12.84 per cent

The scenario is more worse in the case of the APSPDCL as evident from the fact that the amount of sales of the company experienced a compound annual growth rate of 16.16 per cent between 2004-05 to 2015-16, but the amount of net profit came down at a CAGR of - 62.15 per cent over the years. Moreover, the net profit margin ratio of

Inference: APEPDCL showed positive growth over the years and APSPDCL showed positive growth in the ratio.

the APSPDCL which was at - 0.44 IN 2004-05, no doubt increased positively to 3.26 per cent in 2005-06 but declined to 2.21 per cent in 2007-08 and dwindled down to -59.09 per cent in 2012-13 and stood at -24.10 per cent by the end of 2015-16. Further, the average net profit margin ratio of the APSPDCL stood more negative at -9.05 per cent as against -4.09 per cent of the APEPDCL during the period under review.

Trend of	Trend line	Trend(2025)
APEPDCL	Ratio(year)=year*(-1.2292)+8.814568	-21.915432
APSPDCL	Ratio(year)=year*(-2.64077)+19.98796	-593.91709

Table-6: Return on Share holders’ Funds (Rupees in Crores)

Year	APEPDCL			APSPDCL		
	PAT	Share holders Funds	Percent	PAT	Shareholders Funds	Percent
2004-05	14.62	438.3	3.34	-10.38	770.8	-1.35
2005-06	28.90	603.45	4.79	93.16	868.1	10.73
2006-07	10.72	613.8	1.75	56.92	903.76	6.30
2007-08	-40.46	656.19	-6.17	82.09	1100.85	7.46
2008-09	20.62	895.04	2.30	18.67	1227.57	1.52
2009-10	13.37	924.51	1.45	5.68	1350.24	0.42
2010-11	12.81	1082.73	1.18	-1.29	1441.31	-0.09
2011-12	24.80	1153.37	2.15	5.67	1596.17	0.36
2012-13	-1680.55	1202.91	-139.71	-4672.91	1730.34	-270.06
2013-14	-135.85	1360.57	-9.98	-400.84	1704.52	-23.52
2014-15	-722.24	1422.14	-50.79	-1677.47	2171.15	-77.26
2015-16	-471.86	1550.09	-30.44	-3429.90	2380.3	-144.10
CAGR	- 33.58					
Average Ratio		11.10	-18.34	-62.15	9.85	-40.80

Source: Annual Reports of APEPDCL & APSPDCL

Return on shareholders’ funds

Table 6 presents the scenario of shareholders’ funds, the Profit after tax and the return on shareholders’ funds of

the two DISCOMs during 2004-05 and 2015-16. AS evident from the table, the shareholders’ funds of the APEPDCL which amounted to Rs. 438.3 crores in



2004-05 increased to Rs. 1550.09 crores in 2015-16 registering an annual compound growth rate of 11.10 per cent. And in the case of the APSPDCL the shareholders' funds increased from Rs. 770.8 crores in 2004-05 to Rs.2380.3 crores in the year 2015-16 recording a growth rate of 9.85 per cent. As already stated the profit after tax or the net profit after tax of both the DISCOMs under study experienced a negative growth rate over the years. It could be observed that that the PAT of the APEPDCL and the APSPDCL dropped down on to the negative track registering the respective negative compound annual growth rates of -33.58 per cent and -62.15 per cent during 2004-05 to 2015-16. A further analytical drive into the scenario of the Return on shareholders' equity (ROSE) brings home the observation that both the

APEPDCL and the APSPDCL have not experienced a rosy picture in this regard. It is evident from the fact that the ROSE of APEPDCL which was 3.34 per cent in 2004-05 went up to 4.79 per cent in 2005-06 but gradually declined to the destiny of negativity to stand at -139.71 in 2012-13 and finally at -30.44 per cent in 2015-16. Moreover, it is a matter of deep dismay to find the average return on shareholders' equity at -18.34 per cent in the case of APEPDCL and at -40.80 per cent with regard to APSPDCL. It deserves a note, that in the case of APSPDCL, though the ROSE increased from -1.35 per cent in 2004-05 to 10.73 per cent in 2005-06 and sustained on the positive track up to 2009-10, started recording the negative ROSE at -0.09 per cent, which almost continued and stood at -144.10 per cent by the end of 2015-16.

Table-7: Earnings per Share (Rupees in Crores)

Year	APEPDCL			APSPDCL		
	PAT	Number of Equity Shares	Earning per Share Rs.	PAT	Number of Equity Shares	Earnings per Share
2004-05	14.62	12.2	1.20	-10.38	35.87	-0.29
2005-06	28.90	12.2	2.37	93.16	35.87	2.60
2006-07	10.72	12.2	0.88	56.92	35.87	1.59
2007-08	-40.46	12.2	-3.32	82.09	35.87	2.29
2008-09	20.62	12.2	1.69	18.67	35.87	0.52
2009-10	13.37	12.2	1.10	5.68	35.87	0.16
2010-11	12.81	12.2	1.05	-1.29	35.87	-0.04
2011-12	24.80	12.2	2.03	5.67	35.87	0.16
2012-13	-1680.55	12.2	-137.75	-4672.91	35.87	-130.27
2013-14	-135.85	12.2	-11.14	-400.84	35.87	-11.17
2014-15	-722.24	12.2	-59.20	-1677.47	35.87	-46.77
2015-16	-471.86	12.2	-38.68	-3429.90	35.87	-95.62
CAGR%	33.58	-	-19.98	- 62.15	-	-23.07
Average Ratio						

Source: Annual Reports of APEPDCL & APSPDCL



Earnings Per Share

Table 7 presents the earning per share of the two DICOMS under study during the period 2004-05 to 2015-16. The earning per share is the index of the profitability of the company and also the earning ability of the equity share. As evident from the table the number of equity shares, both of the DISCOMS stood constant over the years at 12.2 in the case of the APEPDCL and it is at 35.87 in the case of APSPDCL. Further, the Profit After Tax of both the companies varied and stood progressively negative over the years under review i.e., between 2004-05 to 2015-16. Therefore, the earning per share also followed the suit destined in the negative direction over the years under reference. It can be seen from the table that in the case of the APEPDCL the earning per share, which was at Rs.1.20 in 2004-05, increased to Rs.2.37 in the following years and stood at Rs.2.03 in the year 2011-11. But, there after the earning per share of the

company stood deplorably negative ranging between Rs. -11.14 (2013-14) to Rs. -137.75(2012-13) during the four years ending with 2015-16 and standing at an average of Rs. -19.98 over the twelve year period. In the case of the APSPDCL, the earning per share which was Rs.-0.29 in 2004-05, no doubt increased to Rs.2.60 in the year 2005-06 and stood at Rs.2.29 in 2007-08, but maintained a low profile in the following years. Moreover, in the four years ending with 2015-16, the earning per share of the APSPDCL recorded negative, ranging between Rs. -11.17(2013-14) to Rs.-130.27(2012-13) standing at an average of Rs.-23.07 over the twelve year period under review. The scenario of the dwindling and the deplorably negative earning per share in the case of both the DISCOMS is largely due to the diving profit after tax which in turn is mostly due to the increasing distribution costs, skyrocketing employee costs and the operational expenditure.

Inference: APEPDCL showed positive growth over the years and APSPDCL showed positive growth in EPS.

Trend of	Trend line	Trend(2025)
APEPDCL	$EPS(\text{year}) = \text{year} * (-6.112) + 44.1957$	-108.6043
APSPDCL	$EPS(\text{year}) = \text{year} * (-7.85428) + 59.39916$	-152.1613

Findings

Liquidity Position

Current Ratio

The current ratio of the APSPDCL ranged between the lowest of 0.35 in the year 2015-16 and the highest of 2.10 times in the year 2009-10. The analysis on the comparative lines drives home the

point that relatively the liquidity position of the APEPDCL stands higher than that of the APSPDCL. This is also evident from the fact that the average current ratio of the former stands at 1.49 as against 1.20 of the latter. Further, the growth rate in the current liabilities of the APEPDCL stands lower (17.7 per cent



) than that of the current assets(18.04 per cent) , whereas in the case of the APSPDCL the growth rate in the amount of current liabilities(24.75 per cent) stands far above that of the current assets(12.23 per cent) indicating lower liquidity and the liquidity crunch. From the correlation perspective, with respect to the current ratio, a Moderate correlation is observed between APEPDCL and APSPDCL . The trend analysis of the current ratio relatively of the two companies under study. The APSPDCL has highest trend value which is 1.728484 above that of the APEPDCL which is 1.650483. This apparently indicates that the APSPDCL will have a greater value of the current ratio by the year 2025.

Quick Ratio

During the period of 2004-05 to 2015-16, the Liquid assets of the APEPDCL registered a compound annual growth rate of 18.08 per cent. The calculated quick ratio of the company was 1.04 in 2004-05 and crept up to 2.48 in 2010-11, but stood at 1.08 in 2015-16. During the period under reference the average quick ratio stands at 1.45. Thus the quick ratio of the APEPDCL, has not been found up to the standard. In the case of the APSPDCL the Liquid assets of Rs. 1006.29 crore in 2004-05 increased to Rs.4012.97 crore in 2009-10 and further looked up to Rs.4273.72 crore in 2015-16 registering a growth rate of 12.81 per cent of compound annual growth rate. The quick ratio of the APSPDCL which was at 1.16 in 2004-05 ,no doubt increased to 2.04 in 2009-10, but markedly declined to 0.35 at an annual compound growth rate of -09.50 indicating the dilution in the liquidity scenario both absolutely and relatively.

With respect to the liquid or acid test ratio, the APEPDCL showed positive growth over the years and APSPDCL showed negative growth in the ratio. the trend value of the Quick Ratio for APEPDCL (1.627842) is higher than that of APSPDCL (0.159344). This clearly indicates and unleashes the projection that APEPDCL will have higher value of the quick ratio by the year 2025.

Cash Position

Both the APEPDCL and the APSPDCL have recorded a negative annual compound growth rate of -05.61 per cent and -06.53 per cent in the average cash ratio over the period under study. Moreover, the analysis brings home the observation that in the case of both the DISCOMS under study, the cash ratios stand dissatisfactory and with negative growth, despite the increasing cash balances, largely because of the growing amount of current liabilities over the years.

Cash to Total Assets

The ratio of cash to total assets Of the APSPDCL, which was at 0.03 in 2004-05 stood at the maximum of 0.10 in the year 2008-09 and finally at 0.04 in the year 2015-16 registering a growth rate of 2.43 per cent ,where the average ratio of cash to total assets stands similar to that of the APEPDCL at 0.05. Thus it is clear from the analysis that the cash reserves of both the DISCOMS under study have not increased in tune with the total assets and thus the cash to total assets ratio also experienced a marked decline over the years ,especially in the case of the APEPDCL when compared to that of the APSPDCL.

Cash to Total Sales

The cash to total sales ratio of the two DISCOMS have not been maintained at



the satisfactory levels, despite the incessant increase in the value of sales over the review period. But it could be noted that relatively the cash to total sales ratio stood better in the case of APSPDCL as against the APEPDCL.

Profitability Position

The net profit margin ratio

The net profit margin ratio of the APEPDCL dwindled down at a rate of -33.58 per cent over the period under review, despite the marked increase in the amount of sales at a compound annual growth rate of 12.84 per cent. The scenario is more worse in the case of the APSPDCL. It is as evident from the fact that the amount of sales of the company experienced a compound annual growth rate of 16.16 per cent between 2004-05 to 2015-16, but the amount of net profit came down at a CAGR of -62.15 per cent over the years. Moreover, the net profit margin ratio of the APSPDCL which was at -0.44 per cent in the year 2004-05, no doubt increased positively to 3.26 per cent in 2005-06 but declined to 2.21 per cent in 2007-08 and dwindled down to -59.09 per cent in 2012-13 and stood at -24.10 per cent by the end of 2015-16. Further, over the years under review the average net profit margin ratio of the APSPDCL stood more negative at -9.05 per cent as against -4.09 per cent of the APEPDCL during the period under review.

Profit After Tax and the Return on Shareholders' Equity

It is observed that that the Profit After Tax of the APEPDCL and the APSPDCL dropped down on to the negative track registering the respective negative compound annual growth rates of -33.58

per cent and -62.15 per cent during the period 2004-05 to 2015-16. It is a matter of greater financial concern for the two DISCOMs under study. Both the APEPDCL and the APSPDCL have not experienced a rosy picture in this regard. It is evident from the fact that the Return On Shareholders' Equity (ROSE) of APEPDCL which was 3.34 per cent in 2004-05 went up to 4.79 per cent in 2005-06 but gradually declined to the destiny of negativity to stand at -139.71 in 2012-13 and finally at -30.44 per cent in 2015-16. Moreover, it is a matter of deep dismay to find the average return on shareholders' equity at -18.34 per cent in the case of APEPDCL and at -40.80 per cent with regard to APSPDCL. It deserves a note, that in the case of APSPDCL, though the ROSE increased from -1.35 per cent in 2004-05 to 10.73 per cent in 2005-06 and sustained on the positive track up to 2009-10, it started recording the negative ROSE at -0.09 per cent, which almost continued and stood at -144.10 per cent by the end of 2015-16. The increase in the operational cost and the employee costs are observed as cascading and pulling down the profits, the return on sales as well as the return on shareholders' equity.

Earnings Per Share dropped down to deplorably negative

During the four years ending with 2015-16, the earning per share of the APSPDCL recorded negative, ranging between Rs. -11.17 (2013-14) to Rs. -130.27 (2012-13) standing at an average of Rs. -23.07 over the twelve year period under review. The scenario of the dwindling and the deplorably negative Earning per share in the case of both the DISCOMS is largely due to the diving profit after tax which in turn is mostly



due to the increasing distribution costs, skyrocketing employee costs and the operational expenditure.

Suggestions

➤ The performance of the distribution companies under study brings to the fore that they have not paid adequate and serious attention to working capital management. Further, the approaches of those who are looking after the financial matters of the companies are not scientific. Therefore, it is imperative that well trained financial experts particularly in the area of working capital management should be appointed and the advices of qualified financial analysts should be obtained for an effective working capital management of power distribution companies in the state Andhra Pradesh.

➤ The present study shows that power distribution companies suffer from insufficient cash resources. They run their business operations without sufficient cash resources, which damage badly their liquidity position and projection.. This trend is to be mitigated by maintaining sufficient cash balance to maintain sound liquidity position and image.

➤ The quick ratio analysis reveals that the volume of quick or liquid assets of the two power distribution companies' viz., APSPDCL, APEPDCL, are very low and the quick ratio is not satisfactory. The observed phenomenon of liquidity drives to suggest that the companies should maintain sufficient amount of liquid assets to meet the cash obligations towards the suppliers of the power distributors.

➤ The size of cash resources and the related management strategies in the power distribution companies are not

satisfactory and no scientific cash management techniques are followed by the units. Therefore, it is suggested that the power distribution companies should adopt the cash management technique of cash budget preparation to estimate cash requirements of the firms in advance for the fulfilment of the obligations without delay and also to enable maintain the cash reserves based on the different motives of cash holding avoiding cash embarrassment.

➤ With regard to the constituents of current liabilities, the bank loans and sundry creditors occupy the major proportion. In general, the sundry creditors are available at free of cost. So, it is suggested that the power distribution companies of Andhra Pradesh state should make continuous efforts to avail this credit facility for longer period and for higher amounts this will certainly help reduce the cost of capital of the distribution companies

➤ The present study shows that the power distribution companies suffer from scanty cash resources. They are observed not having sufficient cash cushion . The DISCOMs run their business operations without adequate cash resources, which may badly damage their liquidity position and also the credit prestige. This trend is universal among the two power distribution companies under study. It is advisable that the power distribution companies should have a comprehensive forecasting of cash, so that they could be prepared to meet any shortage of cash at any particular point of time to avoid cash embarrassment. To be able to do so, they have to bring about a balance between profitability and liquidity. In any case, if they have excess of cash balance, they should invest it in short-term securities or deposit it in commercial banks. It is



suggested that managements have to prepare statements of cash inflows and outflows periodically and assess their cash flows, so that they can take necessary measures to maintain optimum cash balances without affecting their profitability and liquidity.

➤ It is observed from the study that the liquidity position of the power distribution companies in the state, is very weak because the current ratio is below standard norm of 2:1 in almost all the years under review. It is advised that the power distribution companies should maintain considerable levels of current assets to improve and project the liquidity position and the ability to discharge the due liabilities free from embarrassment.

Conclusions

The power distribution entities in the state of Andhra Pradesh have been under the liquidity crunch with falling liquidity cushion. In addition the scarcity of the cash resources and the inadequacy of the cash reserves in relation to sales and assets stand alarming and turn embarrassing with respect to both the DISCOMs. The intensity of the problem is further fanned by the dwindling profitability as measured by the net profit margin, return on shareholders' funds and the return on assets. The increase in the operational cost and the employee costs are observed as cascading and pulling down the profits, the return on sales as well as the return on shareholders' equity.

Scope for further research

In financial domain there lies further scope for research relating to debt management, funds flow management, financial forecasting, resource mobilisation.

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