



## TO STUDY PROFITABILITY AND LIQUIDITY POSITION OF SELECTED ELECTRICITY COMPANIES OF GUJARAT

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**ABSTRACT** The purpose of this study is to analyse the profitability and liquidity position of selected Power Distribution Companies of Gujarat. The present study covers the ten years of financial data from annual reports of DGVCL and UGVCL. This research method is based on Mean Comparison with t-test and profitable ratio is measured in terms of ROA, EBITDA, Net Profit Margin, ROCE, and EPS. The liquidity ratio is measured in terms of the Current Ratio and Quick Ratio for the period 2010 to 2020. The results showed that Based on the analysis conveyed the profitability and liquidity position of DGVCL is better than UGVCL.

**KEYWORDS :** Power Distribution Companies, Financial Performance, Profitability, and Liquidity

### 1. INTRODUCTION:

Profitability and Liquidity are very important for the sustainability and growth of a Company. Liquidity is the amount of cash a company on hand or can generate quickly. Profit is the main objective of any Company and to maintain the business activity. According to (Bhunia, 2010) liquidity is very important to both the inside and the outside analysts because of its close relationship with the daily processes of a business. Every business needs sufficient liquidity for operating regular business activity. Past Studies investigated Working capital management plays a vital role in the accomplishment of businesses because of its effect on profitability and liquidity. Working capital management is Stressed over the issues that arise in managing the current assets and current liabilities and the interrelationship between them. Business profit makes a positive impact on the operation in the market as well as on the shareholders of the company. On the other hand, the high and low liquidity may create problems in the business as the high liquidity is considered the ideal fund of the business, and low liquidity may create financial crises in the business.

#### 1.1 Power Industry in India

Worldwide, India is the third-largest Power producer and electricity consumer. The national electric network in India has an installed size of 383.37 GW as of 31 May 2021—(“Statistical Review of World Energy 2020, 69th Edition,” 2020). According to (Central Electricity Authority, Ministry of New and Renewable Energy, Media Reports, Press Releases, Press Information Bureau (PIB), 2020) as of 31st October 2020, India installed renewable energy capacity (excluding hydropower over 25 MW) had exceeded 89.63 GW. Among all big economies, India has had the greatest rate of increase in renewable energy capacity addition over the previous six years, with renewable energy capacity increasing by 2.5 times and solar energy rising by more than 13 times. renewable energy now provides for more than twenty-four percentage of the country's power generation capacity and around 11.62 percent of the power produced. If big hydro is included, renewable energy would account for more than 36 percent of electric installed capacity and more than 26 percent of electricity production. A total of 49.59 GW of renewable power is being installed, with a further 27.41 GW capacity being bid. This brings the total capacity already commissioned and, in the process, to around 166.63 GW. Furthermore, big hydropower, which has also been designated as renewable energy, has around 45 GW installed capacity and 13 GW under installation. This raises the entire installation and process of installing a renewable energy portfolio to 221 GW.

#### 1.3 Power distribution Industry in Gujarat

To maintain the and making the improvement in the electricity industry in Gujarat, In May 1999 Gujarat Urja Vikas Nigam Limited was introduced which is the subsidiary of Gujarat Electricity Board. The management of Gujarat Electricity Board is divided into seven subsidiary companies such as Gujarat State Electricity Corporation Limited (GSECT), Gujarat Electricity Transmission Corporation Limited (GETCO), Paschim Gujarat Vij Company Limited (PGVCL), Uttar Gujarat Vij Company Limited (UGVCL), Dakshin Gujarat Vij Company Limited (DGVCL) and Madhya Gujarat Vij Company Limited (MGVCL). Power

Generation and Distribution play a vital role in the development of the nation. Therefore, the financial performance of the companies is vital for development. The profitability and Liquidity analysis of Uttar Gujarat Vij Company Limited (UGVCL) could play a significant role in this regard. Based on the results of observations and background exposure to analyze the profitability and liquidity position of selected electricity distribution companies of Gujarat focusing on the ten years of financial performance of two power distribution company DGVCL and UGVCL.

#### 2. Review of Literature:

This previous study provided that working capital management is significant in enhancing liquidity and profitability in the electricity distribution sector (Deloof, 2003). This earlier studied the effect of liquidity and management efficiency on the profitability of select power distribution utilities in India. found that debtor's turnover ratio, collection efficiency, and interest coverage ratio are showing a significant impact while the quick ratio, absolute liquid ratio, and creditor's turnover ratio show an insignificant impact on the profitability of select sample utilities (Azhar, 2015). (Filbeck & Krueger, 2005) a research study has analyzed the working capital management results across industries for a period of 4 years i.e. 1996-2000. The study found that there is a significant difference that exists between industry in working capital management across time and the measures for working capital change significantly within industries over some time. The changes in working capital management may be due to macroeconomic factors such as a change in interest charges, rate of innovation, and competition. (Deloof, 2003) in investigated the relation between working capital management and corporate profitability they suggested that managers can create value for their shareholders by reducing the number of days accounts receivable and inventories to a reasonable minimum. The negative relation between accounts payable and profitability is dependable with the view that less profitable businesses wait longer to pay their bills. This clears that the Power Generation has not been maintaining the optimum liquidity management during the study period.

#### 3. Research Methodology:

##### 3.1 Research Objectives

- The Focus of the present study is to analyze the liquidity and profitability position. To define the following objective.
- To analyze the liquidity position of selected electricity distribution companies
- To study the profitability of selected electricity distribution companies
- To make suggestions of improvement of financial reliability

##### 3.2 The Hypothesis of the study

There is no significant difference in the profitability of selected electricity distribution companies. There is no significant difference in liquidity of selected electricity distribution companies

##### 3.3 Data Collection and Research Design

To undertake the collected secondary data from the annual report during the period from 2010-11 to 2019-20 of selected two power distribution

companies of the Gujarat region. The sample selection was based on purposive sampling as determined criteria. Moreover, other required information was collected through referring Financial kinds of literature, published articles, related websites, magazines, journals, etc. An earlier study (Nugraha et al., 2021) to analyze the effect of financial ratio factors shown by Current Ratio, Total Assets Turnover, Net Profit Margin and Return on Assets to the percentage increase in profits of automotive and component sub-sector companies analyzed technique is by applying the independent t-test. the independent variables, namely: for Profitability ratio is measured in terms of ROA, EBITDA, Net Profit Margin, ROCE, and EPS, For Liquidity ratio is measured in terms of Current Ratio (CR) and Quick Ratio (QR).

The design study is a quantitative design. The Measuring Profitability and liquidity ratio analysis with the Mean Comparison and statistical independent t-test using SPSS. the t-test is intended to assess the level of significance of the difference of the Profitability and liquidity ratio factors fluctuations in profitability and liquidity of DGVCL and UGVCL (partial). as can be seen below.

#### 4. RESULTS AND DISCUSSION

Ratio analysis is the techniques apply for the current study, profitability and liquidity ratio have been calculated. according to the objective has applied the necessary statistical tools like average mean, percentage, ratio, and statical t-test in using SPSS.

The t-test is intended to estimate the presence or absence of the difference of one independent variable on the dependent variable individually (partial) with no difference on other independent variables (constant). This estimation is implemented by comparing the significance value of t as shown in Tables 1 and 2 sig. t value of significance level (0.05). If the Sig.  $t < 0.05$ ; means there is a picture that the independent variable differences the dependent variable.

**Table 4.1 Mean Comparison of Electricity Destitution Company's DGVCL and UGVCL on Profitability Ratios with t-test**

Variable	DGVCL		UGVCL		t	df	P	Cohen's d
	M	SD	M	SD				
ROA Ratio	1.56	0.63	0.79	0.52	3.01	18.00	0.01	1.34
EBITDA Ratio	0.93	0.42	0.57	0.38	2.07	18.00	0.05	0.90
Net Profit Margin Ratio	0.73	0.31	0.45	0.32	1.96	18.00	0.07	0.89
ROCE Ratio	2.34	0.96	1.23	0.69	2.97	18.00	0.01	1.33
EPS	2.18	0.77	1.13	0.73	3.12	18.00	0.01	1.39

Table I revealed significant mean differences in Rate of Asset (ROA) with  $t(18) = 3.01, p < .05$ . The finding showed that DGVCL exhibited higher scores on ROA ( $M=1.56, SD=0.63$ ) compared to the UGVCL ( $M=0.79, SD=0.52$ ). The value of Cohen's d was 1.34 ( $>0.80$ ) which indicated a large effect size. Findings revealed significant mean difference on EBITDA with  $t(18) = 2.07, p = .05$ , showed that from DGVCL exhibited higher scores on EBITDA ( $M=0.93, SD=0.42$ ) compared to the UGVCL ( $M=0.57, SD=0.38$ ). The value of Cohen's d was 0.90 ( $>0.80$ ) which indicated a large effect size. Findings revealed non-significant mean difference on Net Profit Margin with  $t(18) = 1.96, p > .05$ , showed that from DGVCL exhibited higher scores on Net Profit Margin ( $M=0.73, SD=0.31$ ) compared to the UGVCL ( $M=0.45, SD=0.32$ ). The value of Cohen's d was 0.89 ( $>0.80$ ) which indicated a large effect size. Findings revealed significant mean difference on ROCE with  $t(18) = 2.97, p < .05$ , showed that from DGVCL exhibited higher scores on ROCE ( $M=2.34, SD=0.96$ ) compared to the UGVCL ( $M=1.23, SD=0.69$ ). The value of Cohen's d was 1.33 ( $>0.80$ ) which indicated a large effect size. Findings revealed significant mean difference on EPS with  $t(18) = 3.12, p < .05$ , showed that from DGVCL exhibited higher scores on EPS ( $M=2.18, SD=0.77$ ) compared to the UGVCL ( $M=1.13, SD=0.73$ ). The value of Cohen's d was 1.39 ( $>0.80$ ) which indicated a large effect size.

#### 5. CONCLUSION

In this study is stated the profitability and liquidity position of selected companies of Gujarat. the analysis components of Mean Comparison with t-test and profitable ratio is measured in terms of ROA, EBITDA, Net Profit Margin, ROCE, and EPS have a significant difference in the profitability of DGVCL and UGVCL. In similarly the analysis components of Mean Comparison with t-test and liquidity ratio is measured in terms of the Current Ratio and Quick Ratio have a significant difference in the profitability of DGVCL and UGVCL. Therefore, in order to Base on the analysis conveyed, concluded that DGVCL's last 10-year average profitability and liquidity performance

is better than UGVCL. There is a need for the improvement of the financial performance of the UGVCL Company in the future.

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