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## A LIQUIDITY ANALYSIS OF POWER SECTOR IN GUJARAT

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Neha. K. Patel<sup>1</sup> Dr J.K. Patel<sup>2</sup>  
Corresponding Author- Neha. K. Patel  
Email- [patelneham22793@gmail.com](mailto:patelneham22793@gmail.com)

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### Abstract

Power is the most critical components of infrastructure and crucial for the economic growth and welfare of nations. Electricity industries around the world are undergoing rapid and widespread change in global energy security and climate change pressures. The introduction of power industry sets the stage of entering the electrical energy production and distribution field. There are many ways to produce electricity like from burning fossil fuels such as coal and natural gas, nuclear energy, renewable energy sources such as wind, geothermal and solar energy. The production and distributing of electricity are affects the environment. Electricity plays a vital role in our day-to-day life. Our buildings, organizations, hospitals, agricultures and in fact our whole economy get power from it. In Gujarat state, there is a considerable development of power sector after reformation of Gujarat Electric Board. The GEB was restructured into seven companies' one each for generation and transmission, four distribution companies (Discoms) and a holding company known as Gujarat Urja Vikas Nigam Limited (GUVNL). There are four power distribution companies of Gujarat state like Paschim Gujarat Vij Company Ltd., Uttar Gujarat Vij Company Ltd., Madhya Gujarat Vij Company Ltd. and Dakshin Gujarat Vij Company Ltd. A financial statement furnishes information pertaining to strength of particular Companies so here I, as a researcher, has made sincere efforts to measure the profitability of power distribution companies by applying different methods of analysis like comparative statement, ratio analysis etc.

**Key Words:** Ratio, Electricity, Power Distribution Company, Liquidity position.

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### Introduction

Liquidity management is an important part of the any organization. Liquidity position show the soundness, strength and weakness of business. Liquidity of business is one key factors of business is succeeding or failed. Both the excess and shortage of liquidity affect the interest of the business. Liquidity ratio measure a company's ability to pay debt obligation. Quick ratio means quickly convert into cash some short term assets. Between the excess and inadequate liquidity, the later is considered to be more detrimental, since the lack of liquidity may endanger the very existence of the business enterprise. Besides, both the excess and inadequate liquidity adversely affect the profitability.

### Power Sector In Gujarat

Gujarat is located in western zone of India; it is the 6<sup>th</sup> largest state in terms of areas and 9<sup>th</sup> most population state with over 60 million inhabitants. Gujarat is the one of the prosperous and efficiently governed state in India. During 1980's GEB focused mostly on rural electrification, providing new connections and maintenance activities. It focused in the profitability & revenue recovery suffered hugely.

Accordingly, erstwhile Gujarat Electricity Board was recognized effective from 1 April 2005 into seven companies with functional responsibilities of trading, generation, transmission and distribution etc.

The Gujarat urja vikas nigam limited was incorporated as a govt. of Gujarat Company. Since 100% share in the other six companies are held by GUVNL. 1 April 2005 they have become subsidiary companies of GUVNL as per the provisions of the companies act, 1956. The GUVNL is engaged in the business of bulk purchase and sale of electricity, supervision, co-ordination and facilitation of the activities of its six subsidiary companies. GSEL is engaged in the business of generation of electricity. The GETCO is engaged in the business of transmission of electricity. The UGVCL, MGVCL, PGVCL, DGVCL are engaged in the business of distribution of electricity in the business of distribution of electricity in the Northern, Central, Western and Southern areas of Gujarat respectively.

### Power Sector In India

The first time electric light introduced in Calcutta on 24 July 1879 by P.W. Fleury & Co. The success of electricity in Calcutta and power was next introduced in Bombay. The first

electric lighting demonstration in Bombay was in 1882 at Crawford Market and the Bombay Electric Supply & Tramways Company set up a generating station in 1905 to provide electricity for the tramway. There was significant development of power sector in India after independence. India became independent in 1947. At that time it had a capacity of generating a power of 1,362 MW.

Electricity generation main sources were hydro power and coal based thermal power. The private sector companies carried generation and distribution of electrical power. Calcutta Electric was pivotal institute amongst them. A few urban areas got electricity power but rural areas and villages did not get electricity power. After 1947, purview of State and Central government agencies all new power generation, transmission and distribution in the rural center and the urban center (which was not served by private utilities) was established. In all states of India State Electricity Boards (SEBs) were established. In late sixties, nuclear power was established but development was at slower speed. In the early sixties introduced the concept of administration power systems on a regional basis crossing the political boundaries of states.

#### **Rational Of Study**

Liquidity plays an important role in the successful transaction of the business. A study of liquidity is of major importance to both internal and external analysts because of its close relationship with day to day operations of business.

#### **Objectives Of The Study**

The objective of the research work is to do liquidity analysis of power companies of Gujarat as far as their profitability is concerned.

#### **Research Methodology**

To undertake the study, I have collected secondary data from the annual reports on the website of the companies. The period of the data collection 5 years from 2015 to 2020 of selected power companies of Gujarat region.

#### **6.1 Sample Selection**

Table-1 shows the current ratio of selected two companies from 2015-16 to 2019-20.

Name of the companies	2015-16	2016-17	2017-2018	2018-2019	2019-2020	Average
UGVCL	0.41	0.34	0.40	0.45	0.50	0.42
MGVCL	0.17	0.30	0.43	0.48	0.51	0.38

For this study work I have selected two companies as sample of study.

1. Uttar Gujarat Vij Company Ltd.(UGVCL).
2. Madhya Gujarat Vij Company Ltd. (MGVCL).

#### **6.2 Sources of Data**

A research is based on secondary data and data collected through the company annual reports and its website.

#### **6.3 Hypothesis**

H<sub>0</sub>: There is no significant difference in Current ratio and Acid-test ratio of UGVCL and MGVCL

H<sub>1</sub>: There is significant difference in Current ratio and Acid-test ratio of UGVCL and MGVCL

#### **Research Tools**

The following tools are used to interpret data.

1 Ratio Analysis

(a) Current Ratio

(b) Acid- Test Ratio

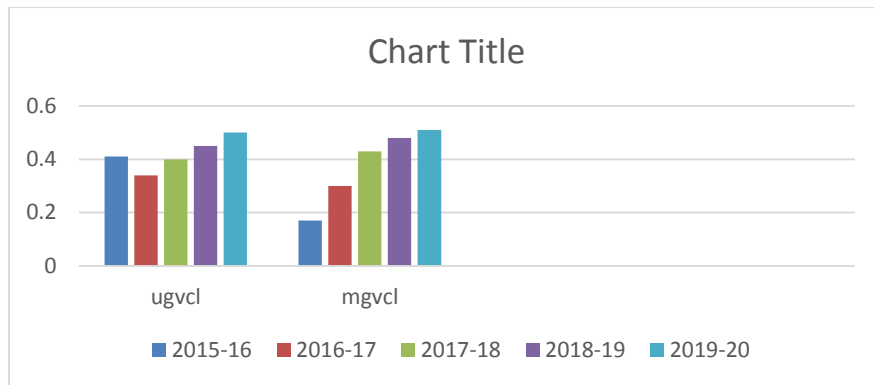
2. F-Test

#### **8. Analysis And Interpretation**

##### **1. Current Ratio:**

Current Ratio is almost widely used ratio shows the proportion of current assets to current liabilities. It is also known as 'Working Capital Ratio' as it is a measure of working capital available at a particular time. The ratio is obtained by dividing current assets by the current liabilities. It is measure of short-term financial strength of the business and shows whether the business will be able to meet its current liabilities, as and when they mature. Liability which will mature within a period of 12 months is a current liability.

They include creditors, bills payable, bank overdraft, outstanding expenses, provision for taxation etc. Similarly, current assets are in the form of cash or can be readily converted into cash within a short time. They include cash, bank balance, stock, debtors, bills receivables, prepaid expenses, accrued income, readily marketable securities etc.



Table

**Interpretation**

Above chart 1 show that the current ratio UGVCL company is higher than the MGVCCL company. The current ratio of MGVCCL company is constantly increasing and the ratio of UGVCL company constantly changing. The current ratio

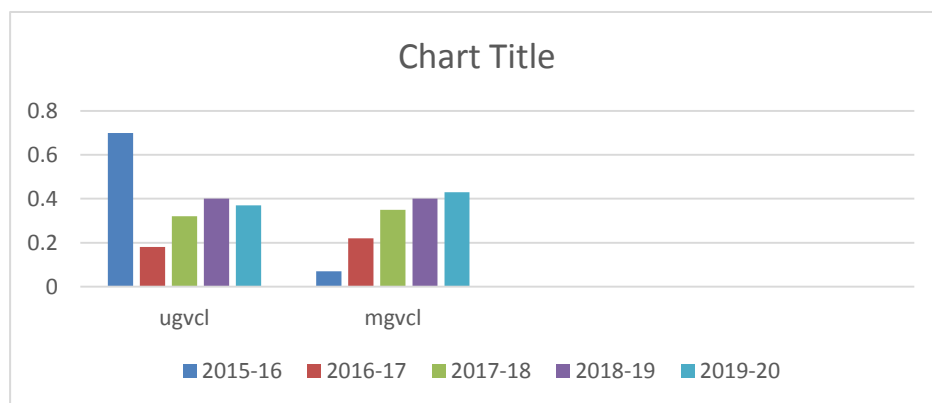
**Testing Hypothesis:**

Calculation value 5.63 > Table values of F –Test 4.11 The calculation values of F test (5.63) were higher than the table value of F test (4.11). So, H<sub>0</sub> Hypothesis is not accepted. The variance arose in the proportion of activities of the current ratio the UGVCL and MGVCCL not differ significantly. So, H<sub>1</sub> hypothesis is accepted

**2 Acid- Test Ratio**

Table-2 shows the Acid-test Ratio of the selected companies from 2015-16 to 2019-20.

Name of the companies	2015-16	2016-17	2017-18	2018-19	2019-20	Average
UGVCL	0.70	0.18	0.32	0.40	0.37	0.4
MGVCL	0.07	0.22	0.35	0.40	0.43	0.3



**Interpretation**

Above chart 2 show that the Acid-test ratio the year of 2015-16 UGVCL company is higher than the Acid-test ratio of MGVCCL company.

The Acid-test ratio of MGVCCL company is constantly increasing and Acid- test ratio of UGVCL company is constantly changing. So the ratio of MGVCCL company is

of UGVCL company is higher than the MGVCCL because higher proportion of current assets compare to current liabilities. The S.D. was lower than 1 during the study period in both the companies.

Acid- test ratio is computed by dividing the value of quick assets by liquid liabilities. The measure of absolute liquidity may be obtained by comparing only cash and bank balance as well as readily marketable securities with liquid liabilities.

$$\text{Acid- test Ratio} = \frac{\text{current assets} - \text{inventories}}{\text{current liabilities}}$$

not satisfactory compare to liquid ratio of UGVCL company. The S.D was lower than 1 in both the company during the study period.

**Testing Hypotesis**

Calculation value 1.65 < Table value of F- Test 4.11

The calculation values of F test (1.65) were lower than the table values of F test (4.11). So,

$H_0$  hypothesis is accepted. The variance arose in the proportion of activities of the acid test ratio between the UGVCL and MGVCCL differ significantly.

**Conclusion**

1. Current Ratio of UGVCL company is higher than the current ratio of MGVCCL company for the study period.
2. Acid- Test Ratio of UGVCL company is higher than the MGVCCL company for the study period.

**Suggestions**

1. Current Ratio of MGVCCL company is lowest so MGVCCL company has to increase current ratio by increasing current assets and decreasing current liabilities.
2. Acid-Test Ratio of UGVCL company is lower than MGVCCL Company so UGVCL company has to increase in Cash and cash equivalents assets.

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