

**“The Financial Performance of Rural Electrification Corporation Limited In  
Indian Power Sector”**

**Authors**

**Srinivas Pulla**

Research scholar,

University college of Commerce and Business management

Kakatiya University Warangal,Telangana,

**Prof. D. Sakriya**

Head and Principal, (Rtd.)

University College of Commerce and Business Management,

Kakatiya University , Warangal,Telangana

**ABSTRACT**

Financial Performance is an important tool to understand Growth of Industry and Company.To Discover Economic facts of Company, Performance Evaluation Process to be initiated by every Company and available financial data used in that process. The main objective of financial performance evaluation is to prepare original financial position in detail. The present study conducted to examine the financial performance of power sector in India.Many public and private sector companies are working in generation, transmission and distribution of electricity throughout the India.Due to the large size sample, Rural Electrification corporation limited has been selected to continue further research.The study on Rural Electrification Corporation Ltd. for a period of 5 financial years from 2016- to 2021.The useful data collected from secondary sources like company annual reports,Minister of power reports and other reports. In this research process used profitability ratios, leverage ratio, Capital Risk to Assets ratios, Dividend ratios and Market Book values of shares.

**KEY WORDS: RONW, ROA, ROC, EPS, PER, SR, PR, CAR, DER, ICR**

## INTRODUCTION OF POWER SECTOR

The Economic development of any country irrespective of its size mainly depends upon the development of the power sector, The power sector development is a key indicator of country economic development. Power is using to all household activities, agricultural activities, industrial activities and all allied areas. The country agricultural, industrial and service sectors development depends on power sector development because power is working as fuel. Economic progress depends very much upon how successfully and profitably a country manages its power sector. Agriculture, industry and other core areas of economic ultimately depends for their development and success on the availability of adequate power constantly and uninterruptedly throughout the year. How important is power consumption in the economic development a country, apart from other factors, may be taken known by taking into consideration its power consumption. If power consumption by all sectors is seen to increase, then the index of economic development as a measure of its progress is also found to increase. Usually the correlation between consumption of power and the growth of economy is taken as a measure of progress.

The Electricity production is a basic indicator of a country size and level of development in all spheres. Some countries are exporting electricity on a massive scale and other are importing it on a large scale. In India most of the consumption is by the agricultural sector, where the rate of revenue is very low. Expanding the supply of electricity to meet the growing demand of ever increasing urbanized Indian economy without incurring unacceptable costs is a major challenge to it. People's standard of living depends on their use of energy in general and access to electricity in particular. It is a major factor on which the policy-makers have to seriously focus their attention and direct their efforts. Compared with several other countries of the world, India is lagging behind many in terms of production as well as per capita consumption of energy.

## POWER SCENARIO IN THE WORLD

Global Energy demand is expected to increase by 48% in the next 20 years based on the increase in global population. Presently 80% energy of the energy demand met from the fossil fuels like coal gas lignite and etc. The fossil fuel reserves are decreasing rapidly with negative environmental changes. The world looking for renewable energy to increase its 20% contribution due the above reason. All the nations shifting their priorities to establish relevant mechanism to produce more energy with available resources. World energy demand in 2021 is set to regain all of the ground lost in 2020 due to pandemic. That upswing in demand for all fuels and technologies has contributed to sharp rises in gas, coal and electricity prices. That over shadowing signs of more structural changes, such as the continuing rapid rise of renewable and electric vehicles.

Electricity demand is increased by 4.5% or 1000 Twh in 2021. This is almost five times greater than the decline in 2020. China alone is likely to account for almost half of the global increase in renewable electricity generation. It is followed the United States, European Union and India. China is expected to

generate 900 over Twh from solar and wind in 2021, the European Union around 580 Twh, and the United States around 550 Twh. The largest consumers in the European Union is Germany, France, Italy and Spain are anticipated to remain below 2019 levels. Demand is expected to rebound only by 1% from 2020 levels. Demand in emerging and developing economics remains on the growth trajectory. This trajectory will be accelerated by the projected strong economic recovery for China and India. With Projected 2021 GDP growth of 9% in China and 12% in India, Electricity demand is expected to grow 8% in both countries compared with 2020 statistics. For China the projected increase comes on top growth, putting demand in 2021. Southeast Asian countries are also to see strong return to growth with demand increasing by 5% in 2021.

## **POWER SCENARIO IN INDIA**

Power has become important and indispensable practically in every sphere of activity. It is used by many categories of consumers. Innumerable gadgets not only domestic ones are run on electricity. Industrial application of power has no bounds. Different kinds of machinery, which run on power, are in use in large, medium and small-scale industries, which have been major consumer of power, to run computers and robots power is required.

The production efforts in the power sector have not been increasing correspondingly and positively for enhancing the consumption levels of people and their standard of living. There is a constant widening of the gap between power generation and demand for power. Though there is a strong correlation between level of income and energy consumption, power development strategies have not been fruitful so far. The stimulus for economic development is to be found in continuous energy production and supply.

India has set ambitious targets for the power sector. We are aiming for 24X7 power for all, with 450 GW of renewable capacity by 2030. Many of the government's major initiatives, such as Make In India or Aatmanirbhar Bharat, require access to reasonably priced, high quality power to take off. However, the distribution sector has been the Achilles' heel of the power sector, consistently making large losses (estimated at Rs 90,000 Crores for FY 21), reflecting weaknesses in operations, infrastructure, and regulation. We will not be able to achieve a high-growth, low-carbon economy unless the distribution sector achieves profitability. The solution to this problem will include smart meters and smart grids, but the most important solutions might lie in institutional smartness - whether in power procurement, in ensuring high quality regulation, or in encouraging private participation in distribution. India is the 4<sup>th</sup> ranked in wind power, 5<sup>th</sup> ranked in solar power generation and 4<sup>th</sup> ranked in renewable power generation installed capacity. India is the only country among the G20 countries that is on track to achieve the targets as per the Paris Agreement. The total power production of the power sector in India is furnished below.

## **ABOUT THE COMPANY.**

Many companies are working in Indian power sector. For this research purpose selected Rural Electrification Corporation limited or REC Limited (REC). The REC was incorporated in the year of 1969

under the Companies Act 1956. Its main objectives is financing to rural electrification scheme all over the india. in the year The mandate/object clause of REC was expanded in the year 2002to enable financing all kinds of power projects without any restriction on population, geographical location or size. The following important milestones were in REC Evolution.

- In the year 1992, REC was notified as a Public Financial Institution under Section 4A of the Companies Act, 1956 (corresponding Section 2(72) of the Companies Act, 2013).
- In the year 1998, REC was registered as a Non-Banking Financial Company (NBFC) under Section 45 IA of the RBI Act, 1934.
- The Government of India upgraded REC as a Schedule “A” PSU in the year 2001.
- REC was granted Mini Ratna Grade-I Status in the year 2002 .
- REC conferred with “Navratna Status” in May, 2008.
- REC has Company (IFC) by Reserve Bank of India (RBI) in September, 2010.
- The equity shares of REC are listed on the National Stock Exchange of India Limited (NSE) and BSE Limited (BSE) since March, 2008. Consequent upon change in the name of the Company from “Rural Electrification Corporation Limited” to “REC Limited”, the Registrar of Companies, issued fresh Certificate of Incorporation dated October 13, 2018.REC is a premier financial institution of the country, with the objective of financing schemes for extending and improving the rural electricity infrastructure,
- REC finances projects in the complete power sector value chain, encompassing generation, transmission and distribution. REC provides financial assistance to state governments, central/state power utilities, independent power producers and private sector utilities, which are critical to the projected addition of installed capacity in the country. The Corporate office of the Company is located at New Delhi and there are 22 State offices located

## REVIEW OF LITERATURE

Performance of Indian Power Sector During A Decade Under Restructuring : A CRITIQUE by *-D . parameswara Sharma p.s. Chandramohan Nair and R. Balasubramanian* The Indian power sector has been facing serious functional problems during the past few decades. In order to re-vitalize the sector and to improve its techno-economic performance. Government of India has initiated restructuring process in 1991. This paper reviews the performance of the Indian power sector in the last decade (1991-2001). while Undergoing this period has been effective in realizing its set objectives and benefited the social development of the Nation. A critical evaluation of the methodology and steps so far adopted for the restructuring process and a few suggestions for re-framing the future course of reforms also have been proposed in this paper.

The inhibitors to growth were many - small and big but the main roadblock in the growth path was government policy. Which made it difficult or rather impossible for a private player to enter. This further aggravated that Indian entrepreneurs didn't have enough knowledge and experience in developing power projects. To worsen the scenario. The SEBs and other government agencies became financially weak to propel any future expansion or growth in the sector. Electricity Act 2003 was a major step in solving the above underlying problems of the power sector. The whole new system is evolved where private players were invited to be active participants. The systems demanded financial, political and other infrastructural growth - with major requirements in roads and communication. Some of the bold steps taken in the Act were moving generation and distribution out of License Raj regime. opening access to national grid and demolishing the 'Single Buyer' model. The failure of the huge federal structure and the changing global scenario has forced government to think of ways to revive this fundamental infrastructure sector. Two of the avenues that government can count on for future growth of this sector is 'Midgets or Small power plants' and 'CDM-Clean Development Mechanism'. (*Singh P.k. 2003*)

*Bawa et. al (1979)* showed that the construction of optimal portfolio could be simplified by using simple ranking procedures when the return are followed a stable distribution and the dependence structure had any of several standard forms. The ranking procedure simplified the computations necessary to determine optimum portfolio.

## RESEARCH METHODOLOGY

### OBJECTIVES OF THE STUDY-

1. To study the effectiveness of financial measures in REC Ltd.
2. To study the performance of company engaged in financing .
3. To study and understand the effectiveness of the management in REC Ltd.
4. To understand Capital Risk at assets of Company.
5. To evaluate and analyze the growth of REC Ltd.

### SOURCES OF DATA

To conduct research data have been collected from following secondary sources

1. Company's annual reports.
2. Minister of Power(MoP) reports
3. Journals and different websites.

**TOOLS AND TECHNIQUES FOR DATA ANALYSIS**

To understand the financial performance of company, used profit before tax , profit after tax, profitability ratios, capital risk to assets ratios, leverage ratios and market valuation charts .

**DATA ANALYSIS**

**FINANCIAL PERFORMANCE**

In the investment decisions Profit Before Tax (PBT) is one of the more important aspect . Just like Earnings before net interest and tax (EBIT). NPAT is one of the figure that a fundamental analyst or value investor would considered before making an investment decision. Table 1 can be concluded that in REC Ltd. Profit before tax and profit after tax is uneven 2016-17 to 2020-21 financial years. The profit before tax is showing growth of company and recorded Average annual profit is Rs. 8,116.6 Crores. The profit after tax also showing growth in the study period and recorded Average annual Profit after tax is Rs. 5,935.2 Crores.

**Table 2- Profit analysis**

| Year | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Average |
|------|---------|---------|---------|---------|---------|---------|
| PBT  | 8860    | 5884    | 8100    | 6983    | 10756   | 8,116.6 |
| PAT  | 6245    | 4420    | 5763    | 4886    | 8362    | 5,935.2 |

**PROFITABILITY RATIOS**

Table 3 shows Profitability ratios from the 2016-17 financial year to 2020-21 financial year. NPMR is 26.47 in the financial year 2016-17 and reduced to 23.63 in the financial year 2020-21. OPMR showed fluctuations from 34.74 in the year 2016-17 to 29.76 in the year 2020-21. It is an indication of very high return on share holders’ equity. ROA of the company indicates that the company has not utilized the assets efficiently during the study period. In the year 2016-17, it was maximum at 3.05 and reduced to 2.09 in 2020-21. Moreover, ROCE has in decreasing trend from 4.23 in 2016-17 to 2.69 in the year 2020-21 indicating decreasing profitability of the company. RONW is 20.17 in 2016-17 financial year and increased to 21.32 in 2020-21.

**Table 3- Profitability ratios (%)**

| Year           | RONW  | OPMR  | NPMR  | ROA  | ROCE |
|----------------|-------|-------|-------|------|------|
| <b>2016-17</b> | 20.17 | 34.74 | 26.47 | 3.05 | 4.23 |
| <b>2017-18</b> | 14.06 | 26.15 | 19.67 | 1.83 | 3.40 |
| <b>2018-19</b> | 17.31 | 31.88 | 22.74 | 1.94 | 2.72 |
| <b>2019-20</b> | 14.09 | 23.23 | 16.37 | 1.41 | 2.01 |
| <b>2020-21</b> | 21.32 | 29.76 | 23.63 | 2.09 | 2.69 |

Abbreviations : RONW means Return on Net worth, NPMR means Net Profit Margin Ratio. OPMR means Operating Profit Margin Ratio . ROA means Return on Assets ROCE means Return on Capital Employed

**CAPITAL TO RISK OF ASSETS ANALYSIS (CAR OR CRAR)**

Table 4 shows the capital adequacy ratio(CAR) or capital to risk of weighted assets(CRAR) ratios. This is very important to borrowings from different agencies or institutions. Capital Adequacy Ratio is at tier-1 capital 19.43 in the financial year and reduced to 16.31 in the financial year 2020-2021. The Capital Adequacy Ratio at tier-2 capital is 2.75 in the financial year 2016-17 and increased to 3.41 in the financial year 2020-21. Overall Capital Adequacy Ratio is 22.18 in the financial year and reduced to 19.72 in the financial year.

**Table 4- Capital risk to weighted assets ratios.**

| Year    | CRAR<br>Tier-1 Capital | CRAR<br>Tier-2 Capital | CRAR  |
|---------|------------------------|------------------------|-------|
| 2016-17 | 19.43                  | 2.75                   | 22.18 |
| 2017-18 | 16.84                  | 2.55                   | 19.39 |
| 2018-19 | 14.44                  | 3.33                   | 17.77 |
| 2019-20 | 13.17                  | 2.89                   | 16.06 |
| 2020-21 | 16.31                  | 3.41                   | 19.72 |

**LEVERAGES PERFORMANCE**

Table 5 shows the solvency ratios of REC limited. Debt Equity ratio has been 5.03 times in the financial year 2016-17 and increased to 7.4 in the 2020-21 financial year. It indicates that total liabilities were higher than owners' equity, The Interest coverage ratio of the company was highly satisfactory in the initials yeas. It was 1.64 in 2016-17 thereafter, it starts decreasing and reached to 1.50 in 2020-21. It indicated decreasing earning capacity and excessive use of debt during these year. The solvency ratio is 84.08 and proprietary ratios is 15.92 in 2016-17 and solvency ratio increased to 89.15 and proprietary ratio decreased to 10.85 in 2020-21 financial year .

**Table 5- Leverages performance in ratios**

| Year    | DER  | ICR  | SR    | PR    |
|---------|------|------|-------|-------|
| 2016-17 | 5.03 | 1.64 | 84.08 | 15.92 |
| 2017-18 | 5.60 | 1.44 | 85.60 | 14.40 |
| 2018-19 | 6.98 | 1.52 | 88.48 | 11.52 |
| 2019-20 | 7.94 | 1.37 | 89.87 | 10.13 |
| 2020-21 | 7.40 | 1.50 | 89.15 | 10.85 |

Abbreviations: DER means Debt Equity Ratio: ICR means Interest Coverage Ratio

SR means Solvency Ratio. PR means Proprietary Ratio.

**DIVIDEND PERFORMANCE**

Table 6 shows the management efficiency towards dividend distribution in rupees and rate of distribution to the shareholders of company from the financial years of 2016-17 to 2020-21. According to the data, company paid capital Rs.1974.92 crores and not changed in the study 5 years. The total dividend (along with Interim dividend) declared and distributed among the shareholders Rs. 1905.79 crores in the financial year of 2016-17 and such amount increased to R. 2508.14 crores in the financial years of 2020-21. The Dividend rate is 96.5 % in the 2016-17 financial year and 127% in the 2020-2021 financial year. It is observed that company increased dividend rate in the subsequent years. ratios of NTPC from 2010-11 to 2015-16.

**Table 6- Dividend performance of REC Ltd.**

| Year    | Paidup capital<br>Rs. in Crores | Dividend<br>Rs. in Crores | Dividend per<br>Share in Rs. | Rate of Dividend<br>in percentage |
|---------|---------------------------------|---------------------------|------------------------------|-----------------------------------|
| 2016-17 | 1974.92                         | 1905.79                   | 9.65                         | 96.50                             |
| 2017-18 | 1974.92                         | 1807.05                   | 9.15                         | 91.50                             |
| 2018-19 | 1974.92                         | 2172.41                   | 11.00                        | 110.00                            |
| 2019-20 | 1974.92                         | 2172.41                   | 11.00                        | 110.00                            |
| 2020-21 | 1974.92                         | 2508.14                   | 12.70                        | 127.00                            |

**MARKET VALUATION**

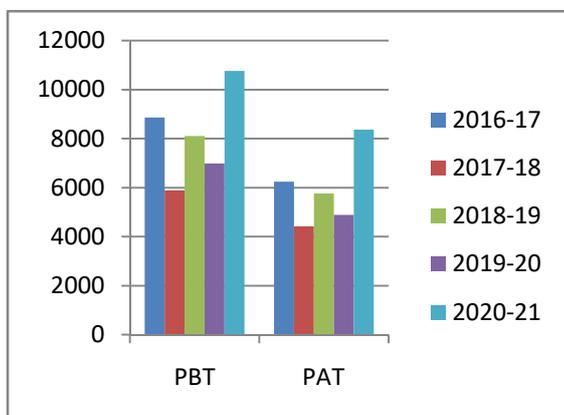
Table 7 shows the market Valuation Ratios of REC from 2016-17 to 2020-21. Earnings per share of the Company was Rs 31.63 in 2016-17 and increased to Rs. 42.34 in 2020-21. It was higher in the initial

years of the study in subsequent years. The price earnings ratio is 5.72 times in the financial year of 2016-17 and It is reduced to 3.10 in the year of 2020-21. The Book values of share is 168.75 in the year of 2016-17 and it is increased to 219.89 in the year of 2020-21. It an indication of the above research and data analysis and interpretation. following conclusion can be made. The REC limited earning per share and market book values were increasing pattern and achieved growth in the research period.

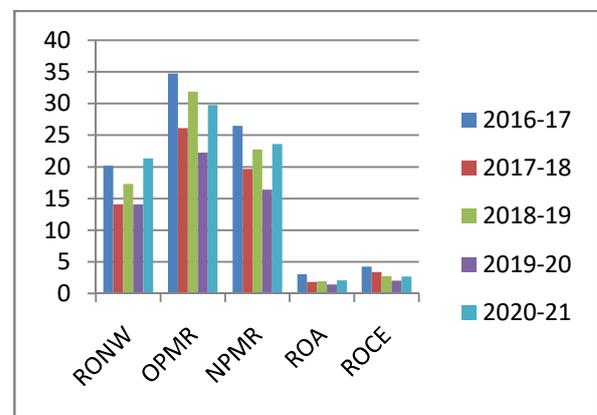
**Table 7- Market Valuation ratios**

| Year    | Earnings per share<br>(In Rs.) | Price earnings ratio<br>(in times) | Market to book value<br>ratio (in times) |
|---------|--------------------------------|------------------------------------|--|
| 2016-17 | 31.63                          | 5.72                               | 168.75                                   |
| 2017-18 | 22.38                          | 5.30                               | 163.57                                   |
| 2018-19 | 29.18                          | 5.24                               | 173.69                                   |
| 2019-20 | 24.74                          | 3.59                               | 177.61                                   |
| 2020-21 | 42.34                          | 3.10                               | 219.89                                   |

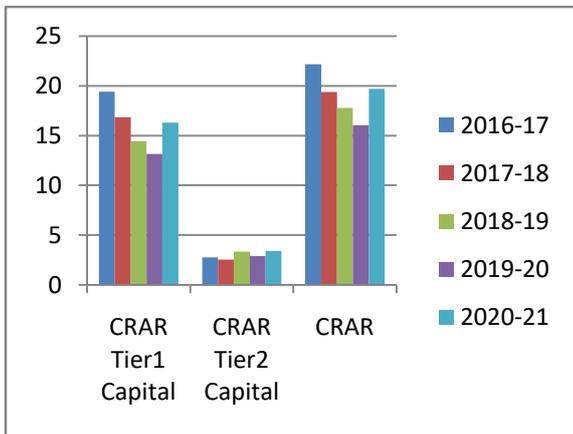
**Interpretation of Results**



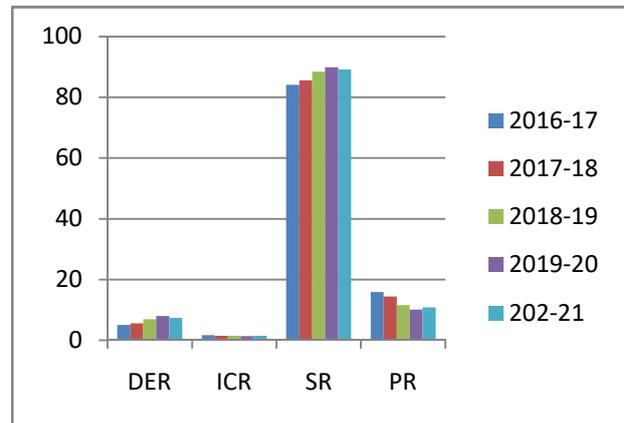
**A) PBT AND PAT**



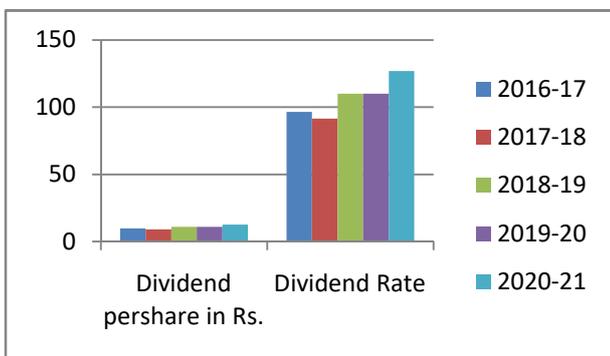
**B) Profitability Ratios**



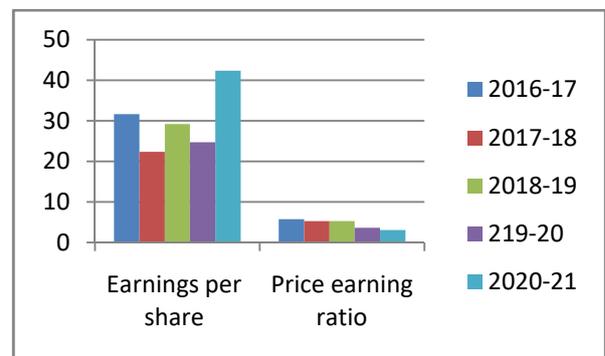
C) Capital Risk to Assets



D) Leverage Ratios



E) Dividend Analysis



F) Market Values of share

After the study, Data interpretation is with charts as follows:

1. Profit before the tax and profit after the taxes of Rural electrification company limited has been positive during the study period from 2016-17 to 2020-21 financial years . Profit before values are 3 times and Profit after tax values are 2 times more than equity share paid-up capital.

2. The profitability of REC Ltd. influencing environmental changes like covid-19 and it reduced up to financial year of 2019-20 has declined over the period of study. All ratios like return on network, operating profit margin , return on assets, return on assets and return on capital employed were decreased up to 2019-2020 financial year. But all the returns increased in the financial year of 2020-21.

3. The Leverage ratios profit margin of REC Limited. has been fluctuating trend while the Debt-equity ratios more than standard ( 2:1) and solvency ratios were gradually increased up to the study period. Interest coverage ratios is less than standard (6 times) and Proprietary ratios were more than standard ( 1:3).

4. The Capital risk to average assets ratio is essential to understand to borrowings. It is showing decreasing trends in the study period.

5. The company dividend distribution policy is with high standards. The company paid dividend is at the rate of equal to 100% and more than 100%. This situation creates satisfaction among the shareholders

6. The company share market price is showing increasing trend at BSE and NSE stock markets.

## CONCLUSION AND SUGGESTIONS

On the basis of the findings of study, following Conclusion and suggestions are offered to improve the financial performance of REC Ltd.

1. The Profitability Ratios like RONW, OPMR, NPMR, ROA, ROCE of REC Ltd indicates poor liquidity position the company and it is suggested that the company must reduce the amount of current liabilities and/ or increase the amount of current assets up to a reasonable level.

2. The Capital Risk to Assets Ratio of the company has been satisfactory. It is suggested that REC Ltd. should continue or reduce in order to improve the quality of financial borrowings.

3. The Debt-Equity ratio is increasing pattern over the period of study. It is suggested that this level should change for the better improvement.

4. The Dividend policy of the company is more than standards and suggested to management to continue existed dividend policy in future plans.

5. The Interest coverage ratio of company is acceptable and suggested the management to continue in future business operations.

6. The Solvency ratios are more than 80% and its more than standards. It is suggested that keep the existed policies.

7. The proprietary ratios are decreasing pattern. According the standards that ratio is more required. It is suggested the company to improve the share holder proportion.

## LIMITATIONS OF THE STUDY

The study is based on annual financial reports and therefore the results and findings are subject to all limitations inherent in the published financial reports. Besides, the study is limit to a period of five financial years only. The study covered only one company and therefore the findings may not be applicable to other companies as a whole.

## ACKNOWLEDGEMENT

This an original work of the authors and any references and work uplifted in part or in whole is genuinely stated productive ideas and suggestions from persons are welcomed and appreciated Any errors and omissions are our own.

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