An analysis of Financial Management and Viability of Power distribution companies

(A case study of UPCL)

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Abstract

Financial Management as the name suggests is management of finance. The objective of Financial Management is to make efficient use of economic resources mainly capital. Financial management at UPCL becomes important to analyse because it receives funds from state government and central government whose mismanagement has large opportunity costs for the people of Uttarakhand. The face value of shares implying that the capital has been eroded due to inefficient financial management at UPCL. This further implies that if the situation remains so, UPCL would face acute shortage of funds (in absence of government grants and subsidies) and would not be able to carry on business in future. Modal value of ranks for Financial Viability of UPCL (on basis of Risk Analysis and Solvency Analysis) is 3 implying poor position of UPCL which is interpreted as poor capital and financial structure of UPCL. Poor financial and capital structure of UPCL further implies poor financial viability of UPCL.

Introduction

Financial Management as the name suggests is management of finance. The objective of Financial Management is to make efficient use of economic resources mainly capital. In a country like India whose development rests on the availability and utilisation of capital, the cost of mismanagement of funds is a hindrance to economic well being of nation and its citizens.

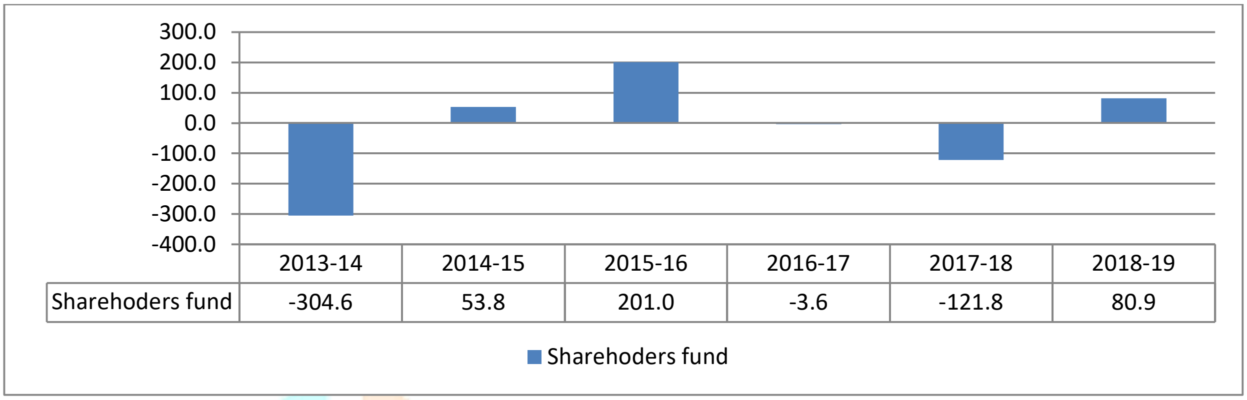
Financial management at UPCL becomes important to analyse because it receives funds from state government and central government whose mismanagement has large opportunity costs for the people of Uttarakhand. The funds which can serve other welfare function for the people of state are diverted to UPCL and if the UPCL is not able to utilise these funds appropriately then the state as well as its citizens have to suffer economically as well as socially.

The prime objective of Financial Management at UPCL would be reflected in the

1. Shareholders fund,

2. EPS (Earning per Share), and
3. Book value of its shares

1. Shareholders' funds refers to the amount of equity in a company, which belongs to the shareholders. The amount of shareholders' funds yields an approximation of theoretically how much the shareholders would receive if a business were to liquidate.

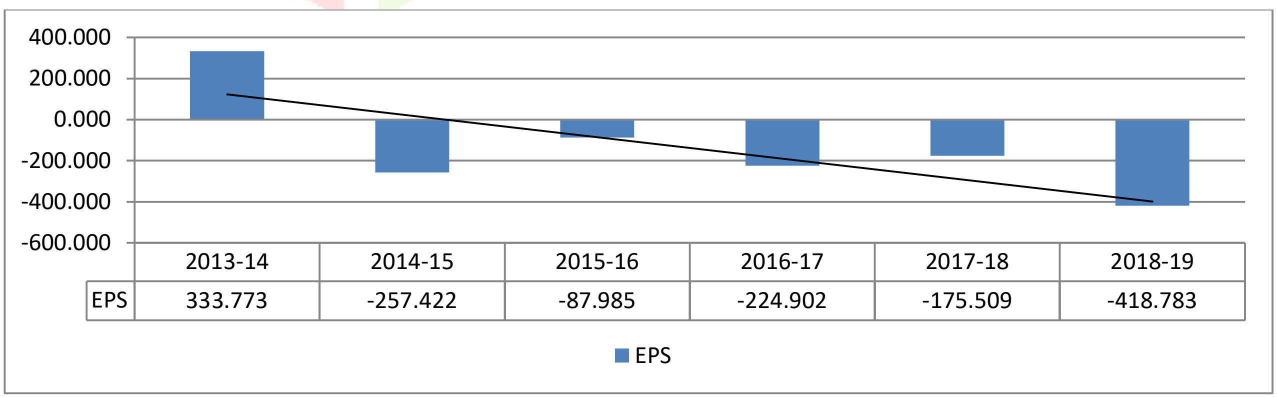


The shareholders funds have remained volatile over the 6 year period under study. The shareholders funds have decreased till 2017-18 and increased in the year 2018-19 which is due to the inflow of government grants and issuance of share capital by government of Uttarakhand.

The shareholders funds of UPCL are expected to increase due to increase in the profitability and efficiency of UPCL. The change in shareholders fund of UPCL can better be analysed by analysing the Earnings per share of UPCL which is a perfect measure of profit available for shareholders which in turn becomes a reason for increase in shareholders fund.

2. Earnings per share (EPS) is calculated as a company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability. It is common for a company to report EPS that is adjusted for extraordinary items and potential share dilution. The higher a company's EPS, the more profitable it is considered.

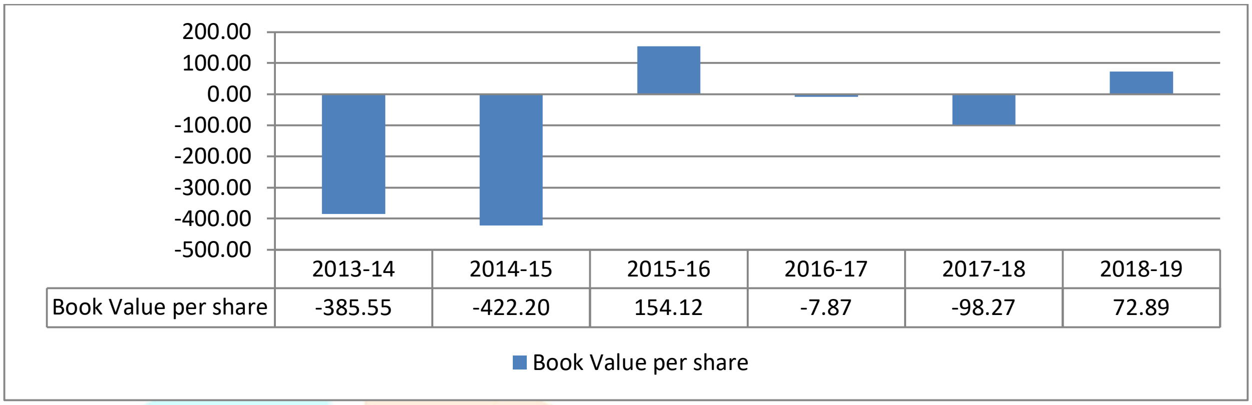
The earnings per share of UPCL for the past 6 years have been represented by graph below.



The earnings per share of UPCL for the past 6 years show a decreasing trend. The value of Earnings per share has been negative always and has decreased continuously. This becomes a reason for decrease in the value of shareholders fund. The amount by which shareholders fund is decreasing year on year due to huge losses can be comparatively analysed by comparing the book value of share with the earnings per share.

3. Book value per share compares the amount of stockholders' equity to the number of shares outstanding. If the market value per share is lower than the book value per share, then the stock price may be undervalued. The Book value of shares must be equal to the face value of share if the capital provided by ht shareholders is to be kept intact. An increase in the book value will be reflected in increasing shareholders fund whereas decreasing book value less than the face value of share leads to wiping off of capital.

The book value and the trend of change in book value of UPCL for the past 6 years have been represented by the graph below.



The book value of share of UPCL have fluctuating. The book value of shares was negative in the year 2013-14 however is positive for the year 2019 but the book value has always remained less than the face value of shares implying that the capital has been eroded due to inefficient financial management at UPCL. This further implies that if the situation remains so, UPCL would face acute shortage of funds (in absence of government grants and subsidies) and would not be able to carry on business in future.

Analysis of Financial management of UPCL

The weak financial management followed by UPCL is reflected in the decreasing shareholders fund, negative earnings per share and negative book value of shares fails to establish UPCL as financial viable in future.

The ultimate aim of financial management in UPCL is to establish and maintain financial viability. Financial viability ensures that the UPCL can continue to implement its Mandate effectively without impairing its capital base. It will also enable the UPCL to move towards self-sufficiency in meeting the growing demand for its distribution business.

Financial Viability of UPCL can be analysed on the basis of two parameters. First parameter includes ability of the UPCL to raise long term, medium term & short term funds while second parameter includes income of UPCL to meet its future obligations.

Financial viability parameters can be analysed on key financial viability areas as classified below.

S.No	Financial Viability Parameters	Financial Viability Areas
1	Financial viability includes the ability of the organization to raise funds required to meet its functional requirements in the short run, medium and long term.	1. Risk Analysis 2. Solvency Analysis

2.	Financial viability is the ability of UPCL to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining 100% service levels.	3. Profitability Analysis 4. Efficiency Analysis 5. Return on Assets

Assessment of financial viability of UPCL involves a review of UPCL's audited financial statements, financial performance reports, business plan and other information that supports financial analysis. The five key financial viability areas can be evaluated quantitatively by financial ratio analysis (classified below) considering the data from past years financial statements of UPCL. The financial viability of UPCL is analysed on the basis of 5 constructs and related 20 financial ratios as classified below.

S.No	Financial Viability Areas	Constructs		Ratio
1	Risk Analysis	Capital and financial Structure	1	Capital Gearing Ratio
			2	Total Assets to Debt ratio
			3	Proprietary Ratio
			4	Interest Coverage Ratio
			5	Debt Equity Ratio
			6	Book value Per Share
2	Solvency Analysis	Liquidity	7	Current Ratio
			8	Liquid ratio
			9	Absolute Liquid ratio
3	Profitability Analysis	Profitability	10	Gross Profit Ratio
			11	Net Profit Ratio
			12	Operating Profit Ratio
			13	Earnings Per share
			14	Return On Equity
4	Efficiency Analysis	Efficiency	15	Working capital Turnover Ratio
			16	Average Collection Period
			17	Average payables Period
5	Return on Assets	Asset management	18	Total Assets turnover Ratio
			19	Fixed Assets turnover Ratio
			20	Current Assets turnover Ratio

It might seem that some financial ratios have not been considered and ignored but the reason being that either they have already been captured in one of these 20 financial ratios or the data related to these financial ratios was unavailable for e.g. the market value of the UPCL is not available being a completely government of Uttarakhand undertaking hence book value and face value are treated as the basis. Some financial ratios were not considered because they were subjective and could not be used for comparing the financial viability of UPCL.

The calculated mean value for 6 years of each financial ratio was compared to the ideal average. The ideal average is used to construct a three point scale on the basis of which a score was assigned to each financial ratio where 3 refers to strong, 2 refers to average and 1 refers to poor position.

The scores so assigned to each financial ratio (on the basis of method given above) is used to conclude the financial viability of UPCL under five financial viability areas. Of these five financial viability areas two areas of financial viability i.e. Risk analysis and solvency analysis (by analysing the capital and financial structure) is presented in this study while the other three areas of financial viability are analysed in the next study.

Analysis of Capital and financial structure of UPCL

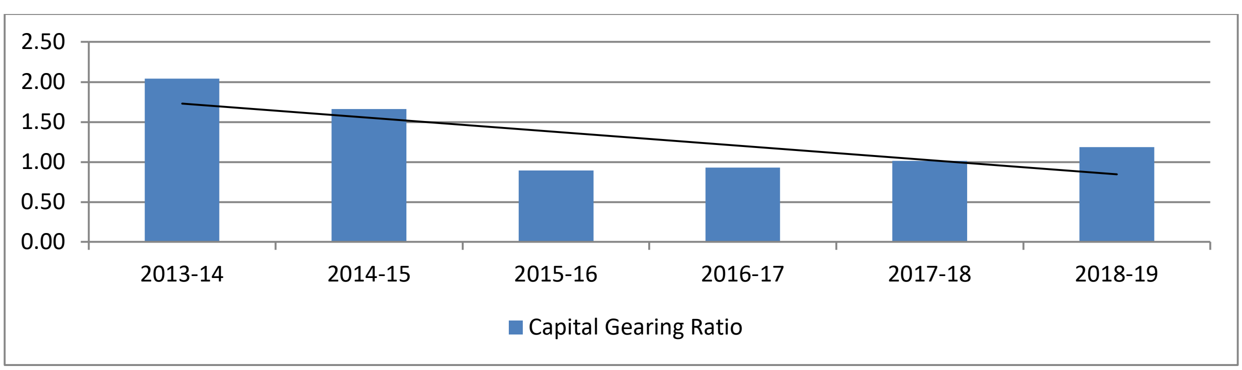
Business people use the term structure in quite a few different ways. The terms "governance," "business," and "legal," are all associated with their own "structures" for instance. Company capital and financial structures consist of Balance sheet liabilities and equities. These structures are the mechanisms by which owners and creditors share risks and rewards in proportion to their share of company funding. Financial structure refers to the balance between all of the company's liabilities and its equities. It thus concerns the entire "Liabilities + Equities" side of the Balance sheet. Capital structure, by contrast, refers to the balance between equities and long-term liabilities. Short-term liabilities do not contribute to capital structure. The following section of the report will present the capital and financial structure of UPCL on the basis of its balance sheet (Refer Appendix) for past 6 year i.e. 2013-14 to 2018-19. 9 parameters (6 parameters for capital structure and 3 for liquidity) were identified for analyzing the capital and financial structure of UPCL. The values for 6 years were calculated and were analysed on a three point scale where strong position is assigned weight of 3 and weak position is assigned weight of 1. On the basis of weights the results are presented below.

Capital Structure Ratios

Capital gearing ratio

Capital gearing ratio is a useful tool to analyze the capital structure of a company and is computed by dividing the common stockholders' equity by fixed interest or dividend bearing funds. A company is said to be low geared if the larger portion of the capital is composed of common stockholders' equity. On the other hand, the company is said to be highly geared if the larger portion of the capital is composed of fixed interest/dividend bearing funds.

Capital gearing of UPCL is decreasing in past 6 years.



Capital gearing of UPCL in 2013-14 it is 2.04 i.e. low geared, in 2014-15 it is 1.66 i.e. low geared, in 2015-16 it is 0.89 i.e. High geared, in 2016-17 it is 0.93 i.e. High geared, in 2017-18 it is 1.01 i.e. evenly geared and in 2018-19 it is also 1.19 i.e. evenly geared and the overall bases its mean value is 1.29 i.e. evenly geared.

Capital Gearing ratio	
Year	**Value of Ratio**
2013-14	2.04
2014-15	1.66
2015-16	0.89
2016-17	0.93
2017-18	1.01
2018-19	1.19
Mean Value of Ratio	**1.29**
Position	**Average**
Interpretation	**Low gearing**
Rank	**2**
Reason	• UPCL is being funded by government which puts in additional capital in times of financial distress in UPCL.
Implications	• Financial distress in times of no funds from state and central governments

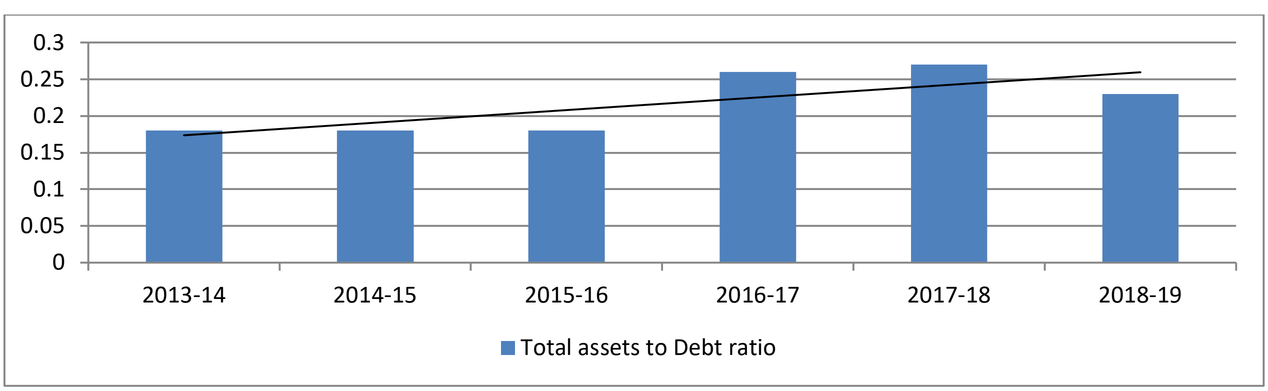
Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
2 and above	Strong	Low Gearing	1
Between 1 and 2	Average	Evenly Geared	2
Below 1	Poor	High gearing	3

The reason for average capital gearing ratio is that UPCL is being funded by government puts in additional capital in times of financial distress in UPCL. UPCL uses shareholders' equity to pay for major costs. This can cause financial distress for UPCL in times of no funds from state and central governments.

The debt to total assets ratio

Total-debt-to-total-assets is a measure of the company's assets that are financed by debt, rather than equity. This leverage ratio shows how a company has grown and acquired its assets over time. Investors use the ratio not only to evaluate whether the company has enough funds to meet its current debt obligations but also to assess whether the company can pay a return on their investment.

The higher the ratio, the higher the degree of leverage (DoL) and, consequently, financial risk. Total assets to debt ratio of UPCL has been increasing in past 6 years.



Total assets to debt ratio of UPCL in 2013-14 to 2015-16 it is 0.18 i.e. Low degree of Leverage, High financial Flexibility, in 2016-17 it is 0.26 i.e. Low degree of Leverage, High financial Flexibility, in 2017-18 it is 0.27

i.e. Low degree of Leverage, High financial Flexibility and in 2018-19 it is also 0.23 i.e. Low degree of Leverage, High financial Flexibility and the overall bases its mean value is 0.22 i.e. Low degree of Leverage, High financial Flexibility.

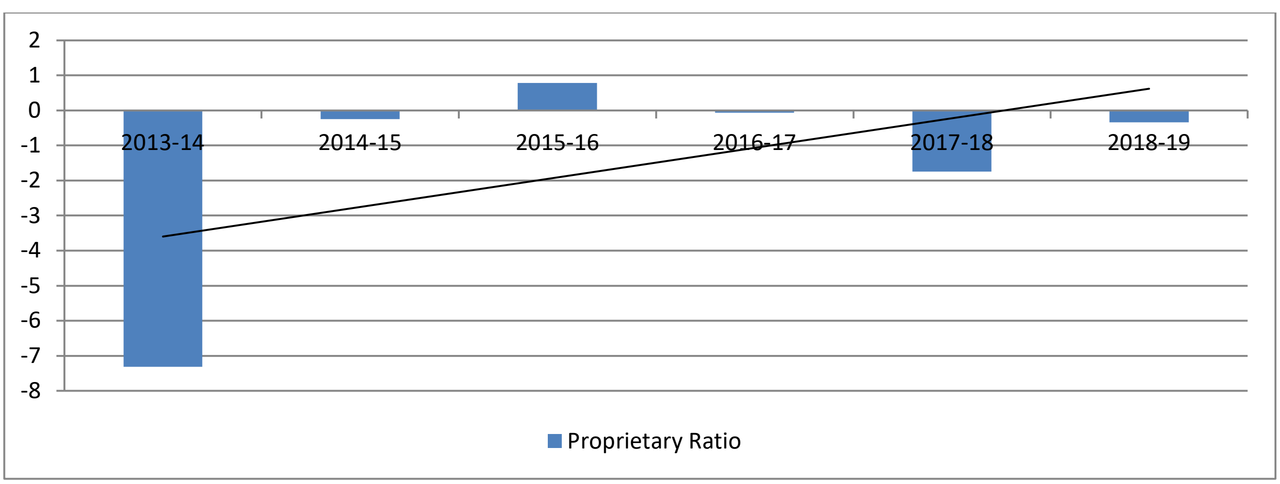
Total Assets to Debt ratio	
Year	**Value of Ratio**
2013-14	0.18
2014-15	0.18
2015-16	0.18
2016-17	0.26
2017-18	0.27
2018-19	0.23
Mean Value of Ratio	0.22
Position	**Strong**
Interpretation	**Low degree of Leverage, high Financial Flexibility**
Rank	**1**
Reason	• UPCL finances a larger portion of its assets through equity. • Low amount of debt • Low amount of assets. • High share of equity in capital structure
Implications	

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
Below 1	Strong	Low degree of Leverage, high Financial Flexibility	1
Between 1 and 2	Average	Medium degree of Leverage, medium Financial Flexibility	2
2 and above	Poor	High degree of Leverage, low Financial Flexibility	3

The strong position of Total Assets to debt ratio of UPCL is because UPCL finances a larger portion of its assets through equity, has Low amount of debt, has Low amount of assets and has a high share of equity in capital structure.

Proprietary ratio

The proprietary ratio measures the amount of funds that investors have contributed towards the capital of a firm in relation to the total capital that is required by the firm to conduct operations. A high ratio will indicate that the firm has sufficient amount of equity to support the functions of the business. Proprietary ratio of UPCL is decreasing in past 6 years.



Proprietary ratio of UPCL in 2013-14 it is negative 7.32 i.e. the indication of poor financial position, in 2014-15 it is further negative 0.24 i.e. indication of poor financial position, in2015-16 it is 0.79 i.e. the indication of weak financial position, in 2016-17 it is negative 0.06 i.e. the indication of poor financial position, in 2017-18 it is negative 1.75 i.e. The indication of poor financial position and in 2018-19 it is -0.34 i.e. the indication of poor financial position. The overall basis its mean value is negative 1.49 i.e. the indication of poor financial position.

Proprietary Ratio	
Year	**Value of Ratio**
2013-14	-7.32
2014-15	-0.24
2015-16	0.79
2016-17	-0.06
2017-18	-1.75
2018-19	-0.34
Mean Value of Ratio	**-1.49**
Position	**Poor**
Interpretation	**Poor Financial position**
Rank	**3**
Reasons	• UPCL is heavily depending on making use of too much trade payables to support operations
Implications	• Total capital may reduce Reduction in credit period from creditors. • Increase in the risk of Solvency

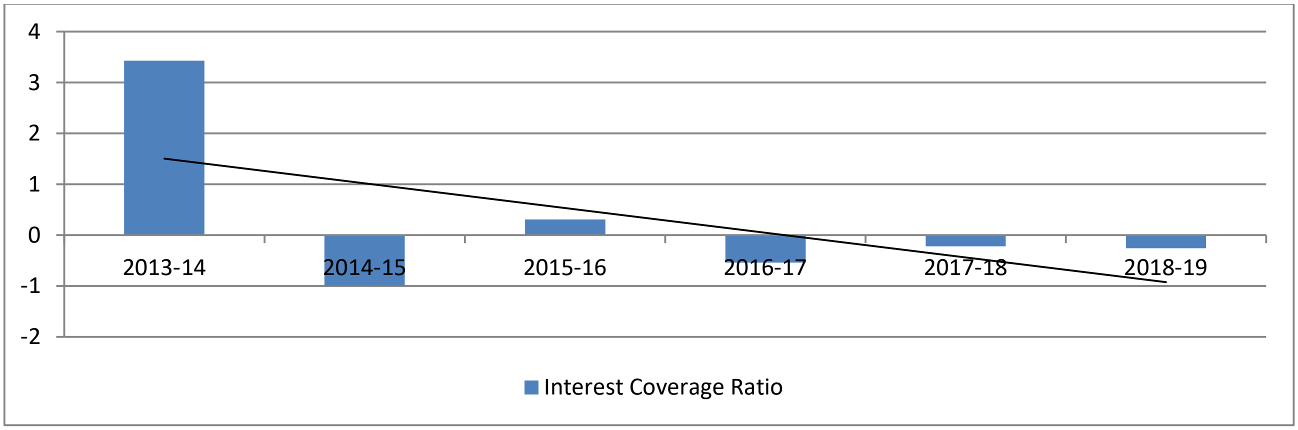
Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
0.5 and above	Strong	Strong financial position	1
Between 0 and 0.5	Average	Weak financial position	2
Below 0	Poor	Poor Financial position	3

Poor Proprietary ratio of UPCL is because UPCL is heavily depending on debts for its operations. UPCL is making use of too much trade payables to support operations. This will reduce the total capital of shareholders. This may either lead to supply cuts from the creditors (UJVNL, PTCUL) and may lead to solvency of UPCL.

Interest Coverage ratio

The interest coverage ratio is a debt ratio and profitability ratio used to determine how easily a company can pay interest on its outstanding debt. Creditors and investors use this computation to understand the profitability and risk of a company. If the computation is less than 1, it means the company isn't making enough money to pay its interest payments. Forget paying back the principle payments on the debt. A company with a calculation less than 1 can't even pay the interest on its debt. This type of company is beyond risky and probably would never get bank financing.

Interest Coverage ratio of UPCL is decreasing in past 6 years and has remained less than 1.



Interest Coverage ratio of UPCL in 2013-14 it is 3.43 i.e. the indication of safe financial structure, in 2014-15 it is further negative 0.99 i.e. indication of High risky financial structure, in 2015-16 it is 0.31 i.e. the indication of High risky financial structure, in 2016-17 it is negative 0.54 i.e. the indication of High risky financial structure, in 2017-18 it is negative 0.22 i.e. the indication of High risky financial structure and in 2018-19 it is negative 0.26 i.e. the indication of High risky financial structure. The overall basis its mean value is 0.29 i.e. the indication of high risky financial structure.

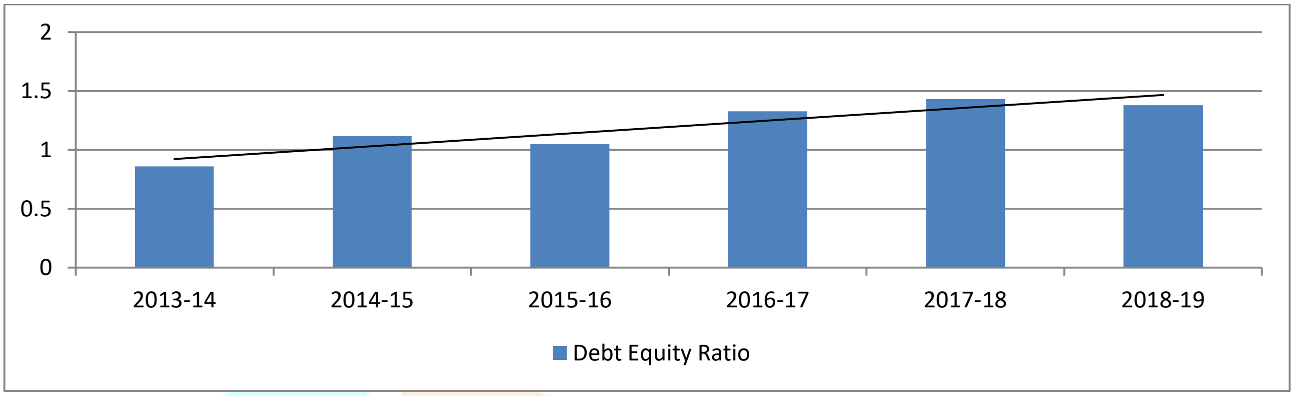
Interest Coverage Ratio	
Year	**Value of Ratio**
2013-14	3.43
2014-15	-0.99
2015-16	0.31
2016-17	-0.54
2017-18	-0.22
2018-19	-0.26
Mean Value of Ratio	**0.29**
Position	**Poor**
Interpretation	**High Risk**
Rank	**3**
Reasons	• Less earnings are available to meet interest payments
Implications	• total capital may reduce Reduction in credit period from creditors, • and that the business is more vulnerable to increases in interest rates • Company will not be able to serve the interest on their liabilities as well as not able to repay. • Increase in the risk of Solvency.

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
1.5 and above	Strong	Safe	1
Between 1 and 1.5	Average	Medium Risk	2
Below 1	Poor	High Risk	3

The poor interest coverage ratio of UPCL is due to Less earnings are available to meet interest payments (low EBIT). This will lead to loss in the value of shareholders. This may also lead to reduction in credit period from the creditors. The UPCL will become vulnerable to increase in interest rates. The UPCL will not be able to pay the interest charges on debt which may increase the risk of liquidation of UPCL.

Debt equity ratio

The debt-to-equity (D/E) ratio compares a company's total liabilities to its shareholder equity and can be used to evaluate how much leverage a company is using. A high debt/equity ratio is often associated with high risk; it means that a company has been aggressive in financing its growth with debt. Higher leverage ratios tend to indicate a company or stock with higher risk to shareholders. Debt equity ratio of UPCL is always increasing in past 6 years.



Debt equity ratio of UPCL in 2013-14 it is 0.86 i.e. the indication of low risk financial structure, in 2014-15 it is 1.12 i.e. indication of medium risk financial structure, in 2015-16 it is 1.05 i.e. the indication of medium risk financial structure, in 2016-17 it is 1.33 i.e. the indication of medium risk financial structure, in 2017-18 it is 1.43 i.e. the indication of medium risk financial structure and in 2018-19 it is 1.38 i.e. the indication of medium risk financial structure. The overall basis its mean value is 1.20 i.e. the indication of medium risk financial structure.

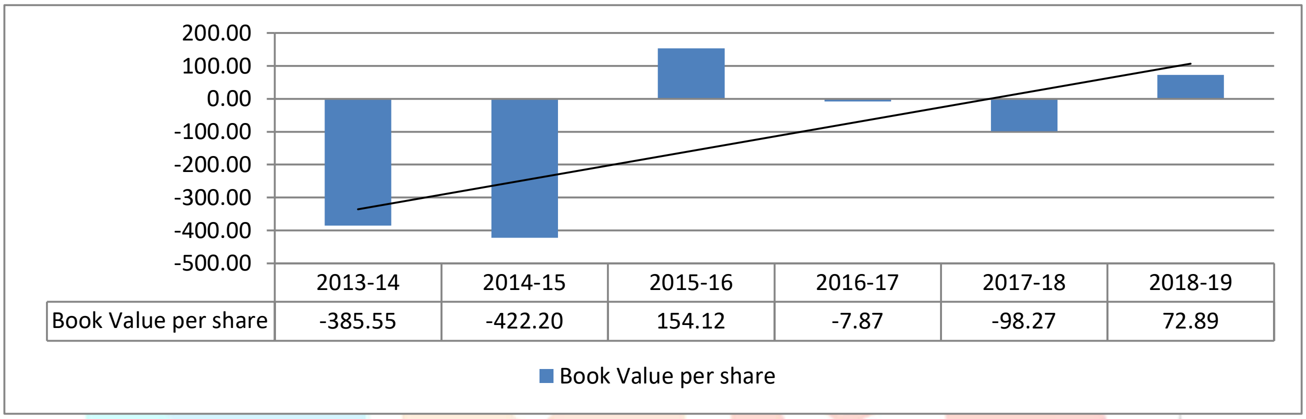
Debt Equity Ratio	
Year	**Value of Ratio**
2013-14	0.86
2014-15	1.12
2015-16	1.05
2016-17	1.33
2017-18	1.43
2018-19	1.38
Mean Value of Ratio	1.2
Position	**Average**
Interpretation	**Medium Risk**
Rank	**2**
Reasons	• Low financing by Debt • Grants from government for capital works hence low need of debt capital • The profitability does not allow UPCL to take debt. • Low creditworthiness based on low profitability does not ensures debt fund availability for UPCL
Implications	• Dependency on capital grants and subsidies from state as well as central government for modernisations, up gradation and expansion.

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
Below 1	Strong	Low Risk	1
Between 1 and 2	Average	Medium Risk	2
2 and above	Poor	High Risk	3

The average debt equity position leads to medium level risk for UPCL which is due to Low financing by Debt capital. Low financing by debt capital is due to consistent grants and subsidies from government for capital works. Low debt capital in overall capital structure is also due to the fact that the profitability position of UPCL does not attract/ allows investors to provide debt funds to UPCL. The UPCL due to low creditworthiness based on low profitability have complete dependency on government grants and subsidies for modernisations, upgradation and expansion. In absence of funds the UPCL will not be able to improve the distribution infrastructure which is a major reason for high AT&C losses of UPCL.

Book value per share

Book value per share compares the amount of stockholders' equity to the number of shares outstanding. If the market value per share is lower than the book value per share, then the stock price may be undervalued.



Book Value per share of UPCL in 2013-14 it is negative 385.551 i.e the indication of decreasing value of UPCL, in 2014-15 it is negative 422.198 i.e indication of decreasing value of UPCL, in 2015-16 it is 154.116 i.e the indication of decreasing value of UPCL, in 2016-17 it is negative 7.865 i.e the indication of decreasing value of UPCL, in 2017-18 it is negative 98.274 i.e the indication of decreasing value of UPCL and in 2018-19 it is 72.888 i.e the indication of decreasing value of UPCL. The overall basis its mean value is negative 686.885 i.e the indication of decreasing value of UPCL.

Book Value per share	
Year	**Value of Ratio**
2013-14	-385.551
2014-15	-422.198
2015-16	154.116
2016-17	-7.865
2017-18	-98.274
2018-19	72.888
Mean Value of Ratio	-686.885
Position	**Poor**
Interpretation	**Decrease in Share price value of UPCL**
Rank	**3**
Reasons	• Low profitability • Low revenue • High expenses due to • stagnant rate of industrial development in Uttarakhand
Implications	• total capital may reduce • Increase in the risk of Solvency. • Decrease in the creditworthiness/credit rating of UPCL.

	• Low financial viability for future		
Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
Book Value > Face Value (1000)	Strong	Increase in Share price value of UPCL	1
Book Value = Face Value (1000)	Average	No change in Share price value of UPCL	2
Book Value < Face Value (1000)	Poor	Decrease in Share price value of UPCL	3

Low/negative book value per share of UPCL is implies a poor position which is due to low profitability due to low tariff rates, unmetered connections, electricity theft, high AT&C losses, slow pace of upgradation in infrastructure, supply of electricity at subsidised rates to UPCL and its employees and government departments . The schemes for the poor such as Ujjawala which provided electricity connection for free also lead to capital revenue losses for UPCL. Similarly free electricity to BPL families, government offices and other public departments also have high negative implications on revenue of UPCL however such information is not being presented in the annual statements of UPCL.

There are two ways of increasing profitability. First is to increase the volume of sales and the second is to increase the selling price. The UPCL is facing dual challenge where increasing the sales volume is hampered by renewable energy sources as solar power grids, energy efficet devices etc. whereas due to political interference it is hard for UPCL to increase the tariffs. The revenue of UPCL is decreasing because of increase in alternative source of electricity supply such as roof top solar power system where the customers of solar power system not only decrease the total volume of sales for UPCL but also receive subsides in bill payment leading to double losses of revenue i.e. on the one hand the amount of consumption is decreasing while on the other hand subsidies are being given at lower amount of consumption.

The expenses are high due to high purchase price of electricity, high expenses in infrastructure development in difficult terrains of Uttarakhand. Also, Bills from industrial customers of UPCL have a high share in total amount of revenue which is not increasing due to stagnant rate of industrial development in Uttarakhand. The expenses are also high due to capital losses owing to losses of infrastructure during natural disasters which are frequent in hilly areas of Uttarakhand.

The correlation between D/E ratio and Book Value of UPCL

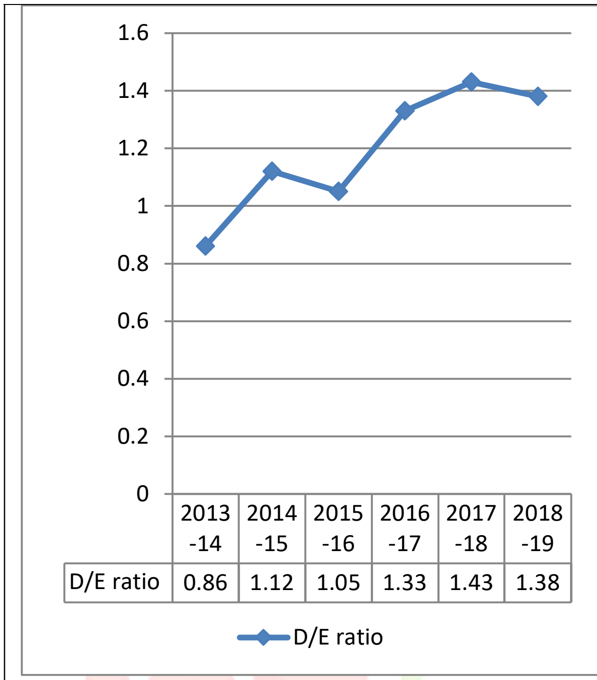
Correlation measures the statistical relationship, or association, between two continuous variables. It gives information about the magnitude of the association, or correlation, as well as the direction of the relationship. The correlation between D/E ratio and Book Value of UPCL.there are the following degree of correlation:

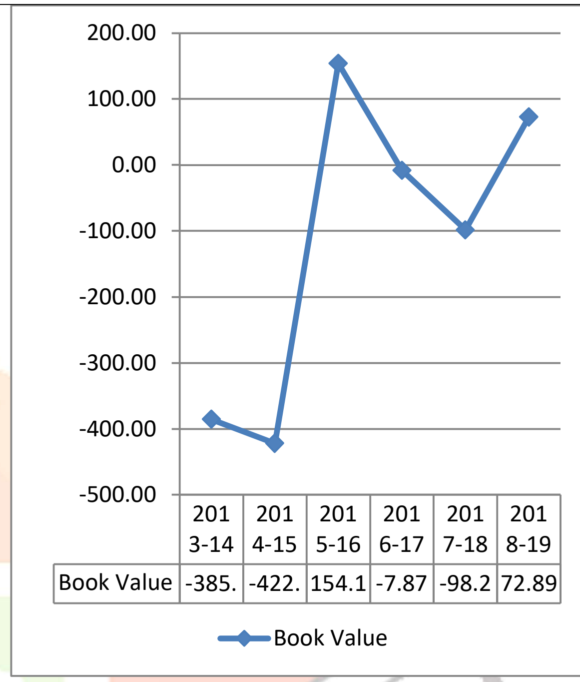
- If the value of correlation is near ± 1, then it said to be a perfect correlation as one variable increases, the other variable tends to also increase (if positive) or decrease (if negative).
- If the coefficient value lies between ± 0.50 and ± 1, then it is said to be a strong correlation.
- If the value lies between ± 0.30 and ± 0.49, then it is said to be a medium correlation.
- When the value lies below + .29, then it is said to be a small correlation.
- When the value is zero.

Year	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
D/E ratio	0.86	1.12	1.05	1.33	1.43	1.38

Book Value	-385.55	-422.20	154.12	-7.87	-98.27	72.89
Correlation between D/E ratio and Book Value of UPCL	0.48					
Analysis	Positive correlation between D/E ratio and Book Value of UPCL implies that as D/E ratio increase the Book value of the firm also increases.					

Therefore the positive correlation and strong correlation between D/E ratio and Book Value of UPCL implies that as D/E ratio increase the Book value of the firm also increases.





Proposition of Net Income Approach Theory of capital structure	Analysis of UPCL on basis of Net Income Approach theory of Capital structure
This approach observes that an alteration in the capital structure of a firm causes change in the overall cost of capital (WACC) and also in the total value of the firm. This theory advocates that a company can increase its value and reduce the overall cost of capital by increasing the proportion of debt in its capital structure.	On comparing D/E ratio with Book value of the UPCL (market value is ignored because shares of UPCL are completely held with Government of Uttarakhand, hence difficult to determine market value) From Figure It implies that increasing the debt in the overall capital increases the book value of firm i.e. the value of the UPCL increase with increase in debt.

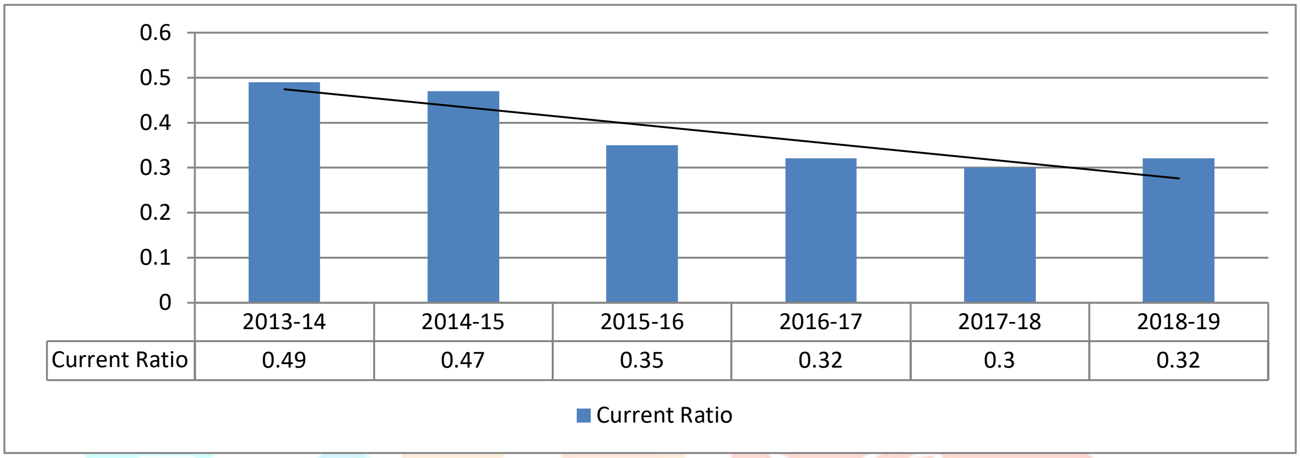
Liquidity position of UPCL

Liquidity ratios are an important class of financial metrics used to determine a debtor's ability to pay off current debt obligations without raising external capital. There are many liquidity ratios used by organizations to manage their liquidity such as (current ratio, quick ratio) Organizations working for the sake of success in its liquidity management on the ongoing calibration between current assets and current liabilities. The improvement in the values of these ratios can be pointing to recovery in liquidity of companies, which may reflect positively on the volume of activity, and therefore on its financial performance.

Liquidity ratios measure a company's ability to pay debt obligations and its margin of safety through the calculation of metrics including the current ratio, quick ratio and absolute liquid ratio.

Current Ratio

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its current assets such as cash, accounts receivable and inventories. The higher the ratio, the better the company's liquidity position.



Current ratio of UPCL is continuously decreasing in past 6 years. Current ratio of UPCL in 2013-14 it is 0.49 i.e. indication of Poor liquidity position, in 2014-15 it is 0.47 i.e. the indication of Poor liquidity position, in 2015-16 it is 0.35 i.e. Poor liquidity position, in 2016-17 it is 0.32 i.e. Poor liquidity position, in 2017-18 it is 0.30 i.e. Poor liquidity position and in 2018-19 it is also 0.32 i.e. Poor liquidity position and the overall bases its mean value is 0.38 i.e. Poor liquidity position.

Current Ratio	
Year	**Value of Ratio**
2013-14	0.49
2014-15	0.47
2015-16	0.35
2016-17	0.32
2017-18	0.3
2018-19	0.32
Mean Value of Ratio	0.38
Position	**Poor**
Interpretation	**Poor liquidity position**
Rank	**3**
Reasons	• Less amount of current assets in comparison to current liabilities • Trade payables (part of current liabilities) are increasing consistently whereas trade receivables (part of current assets) have been consistently decreasing. • The accounting principle related to recording of inventories has changed since financial year 2015-16 which have decreased the total amount of current assets since 2015-16. • The short term loans and advances (part of current assets) have been

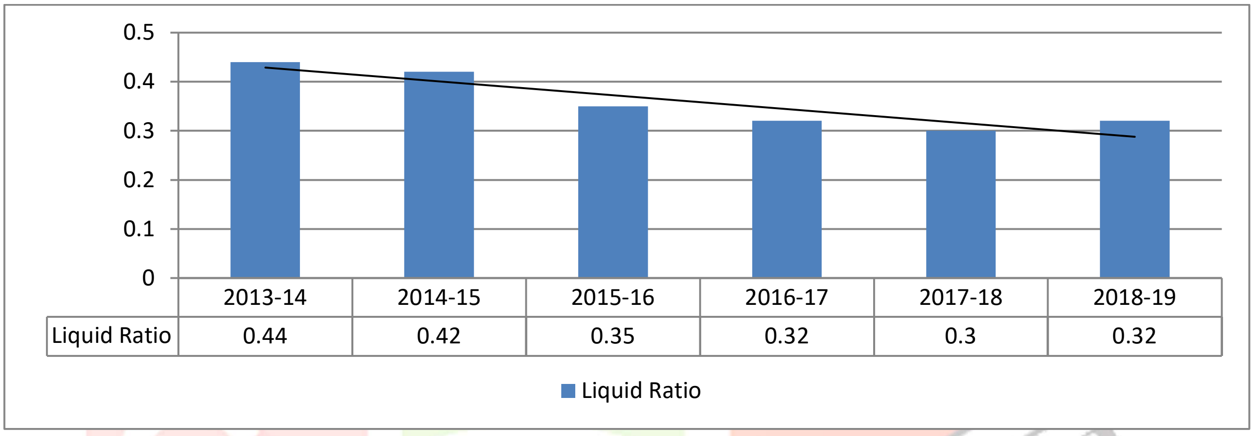
	decreasing consistently. • The short term borrowings (part of current liabilities) have increased considerably in the past 6 years.
Implications	

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
2 and above	Strong	Strong liquidity position	1
Between 1 and 2	Average	Weak liquidity position	2
Below 1	Poor	Poor liquidity position	3

The Quick Ratio

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets and therefore excludes inventories from its current assets. It is also known as the "acid-test ratio".

Liquid ratio of UPCL is continuously decreasing in past 6 years.



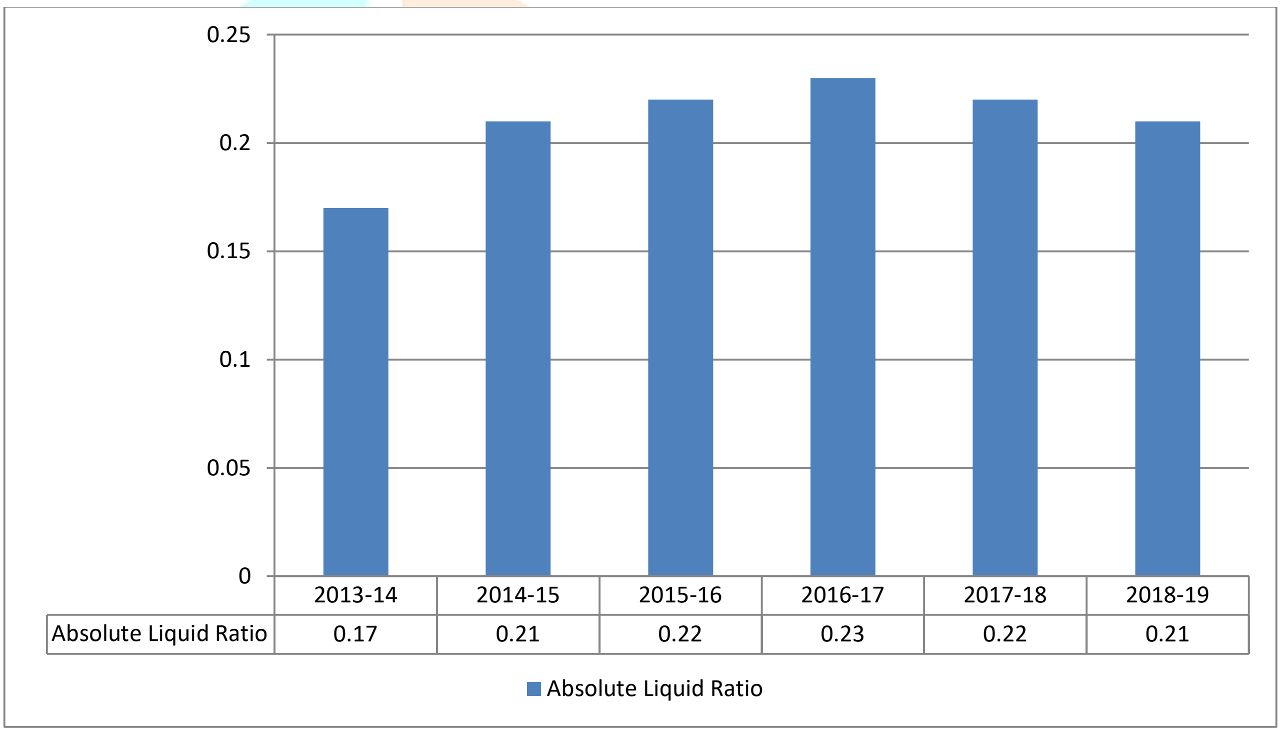
Liquid ratio of UPCL in 2013-14 it is 0.44 i.e. indication of Weak liquidity position, in 2014-15 it is 0.42 i.e. the indication of Weak liquidity position, in 2015-16 it is 0.35 i.e. Weak liquidity position, in 2016-17 it is 0.32 i.e. Weak liquidity position, in 2017-18 it is 0.30 i.e. Weak liquidity position and in 2018-19 it is also 0.32 i.e. Weak liquidity position and the overall bases its mean value is 0.36 i.e. Weak liquidity position.

Liquid ratio	
Year	**Value of Ratio**
2013-14	0.44
2014-15	0.42
2015-16	0.35
2016-17	0.32
2017-18	0.3
2018-19	0.32
Mean Value of Ratio	0.36
Position	**Average**
Interpretation	Weak liquidity position
Rank	**2**
Reasons	• Less amount of quick assets in comparison to current liabilities • The liabilities have increased consistently whereas the increase in quick assets is slow. • Changes in accounting principles for inventory management have reduced the amount of inventory in total current assets, as a reason quick ratio is comparatively better than the current ratio.
Implications	

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
1 and above	Strong	Strong liquidity position	1
Between 0 and 1	Average	Weak liquidity position	2
Below 0	Poor	Poor liquidity position	3

Absolute Liquid Ratio

The relationship between the absolute liquid assets and current liabilities is established by this ratio. Absolute Liquid Assets take into account cash in hand, cash at bank, and marketable securities or temporary investments. The most favourable and optimum value for this ratio should be 1: 2. It indicates the adequacy of the 50% worth absolute liquid assets to pay the 100% worth current liabilities in time. If the ratio is relatively lower than one, it represents the company's day-to-day cash management in a poor light. If the ratio is considerably more than one, the absolute liquid ratio represents enough funds in the form of cash in order to meet its short-term obligations in time.



Absolute Liquid ratio of UPCL in 2013-14 it is 0.17 i.e. indication of Weak liquidity position, in 2014-15 it is 0.21 i.e. the indication of Weak liquidity position, in 2015-16 it is 0.22 i.e. Weak liquidity position, in 2016-17 it is 0.23 i.e. Weak liquidity position, in 2017-18 it is 0.22 i.e. Weak liquidity position and in 2018-19 it is also 0.21 i.e. Weak liquidity position and the overall bases its mean value is 0.21 i.e. Weak liquidity position.

Absolute Liquid Ratio	
Year	**Value of Ratio**
2013-14	0.17
2014-15	0.21
2015-16	0.22
2016-17	0.23
2017-18	0.22
2018-19	0.21
Mean Value of Ratio	0.21
Position	**Average**
Interpretation	**Weak liquidity position**
Rank	**2**
Reasons	• Less amount of absolute liquid assets in comparison to current liabilities • The cash and cash equivalents flows have not increased as compared to rate of increase in current liabilities for e.g. the trade payables have increased at a higher rate than the increase in cash.
Implications	

Scale			
Mean Value of Ratio	**Position**	**Interpretation**	**Rank**
0.5 and above	Strong	Strong liquidity position	1
Between 0 and 0.5	Average	Weak liquidity position	2
Below 0	Poor	Poor liquidity position	3

Analysis of Current financial position of UPCL

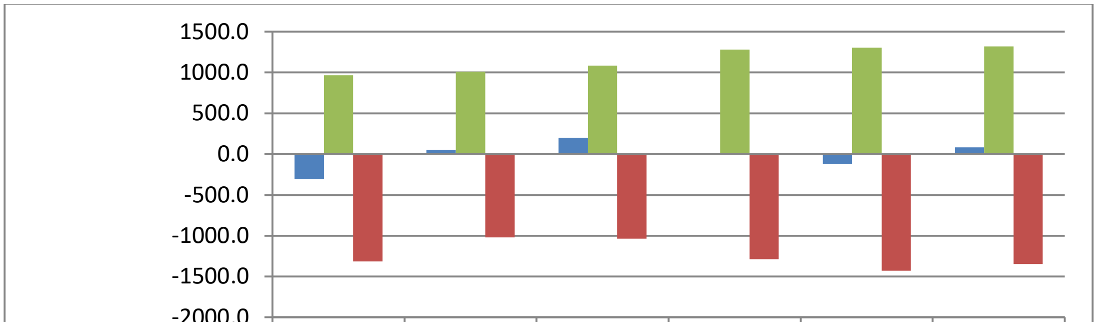
Financial position is the current balances of the recorded assets, liabilities, and equity UPCL. This information is recorded in the balance sheet, which is one of the financial statements. The balance sheet is a snapshot of a UPCL's financial position at present. It lists the Equity and liabilities and company's assets.

I. Equity and Liabilities

Shareholders Fund

There are two important sources to anlayse the shareholders fund of UPCL from the balance sheet. The first source is the money originally invested in UPCL and all the other investments that are made in the UPCL after the initial payment recorded under the head share capital and the second source is the earnings that the UPCL has retained over a period of time through its operations recorded under the heading reserves and surplus.

The shareholders fund is sum of share capital and reserves and surplus of UPCL.



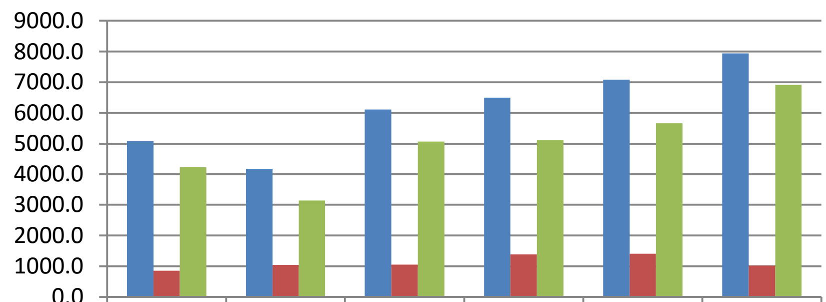
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Shareholders fund	-304.6	53.8	201.0	-3.6	-121.8	80.9
Share Capital	968.9	1008.9	1086.9	1284.0	1306.0	1321.0
Reserves and surplus	-1313.5	-1023.1	-1037.0	-1287.6	-1427.9	-1348.1

- UPCL Share Capital in 2013-14 it is Rs 968.9 Crore, in 2014-15 it is Rs 1008.90 Crore, in 2015-16 it is Rs 1086.9 Crore, in 2016-17 it is Rs 1284.00 Crore, in 2017-18 it is Rs 1306.00 Crore and in 2018-19 it is Rs 1321.00 Crore. it means that overall trend is increasing by year to year basis.
- In 2013-14 the company's shareholder fund is Rs. 304.64 crore in negative which is increases in 2014-15 by Rs 53.83 crore, further increased in 2015-16 by Rs. 201.02 Crore and thereafter decreased in 2016-17 it is Rs -3.61 Crore, in 2017-18 it is Rs -121.82 and further increased in 2018-19 it is Rs 80.84 Crores.
- Reserve & Surplus is always negative i.e. in 2013-14 it is Rs -1113.54 Crore, in 2014-15 it is Rs.-1023.07 Crore, in 2015-16 it is Rs.-1037.01 crore, in 2016-17 it is Rs -1287.64 Crore, in 2017-18 it is Rs – 1427.85 Crore and in 2018-19 it is Rs 1348.05 Crore. It means there are always negative trends in reserve & surplus in UPCL.

The accumulated losses of UPCL represented by the negative reserves and surplus have lead to erosion of share capital. The government has been investing capital in terms of share capital however the losses have tend to reduce the capital and overall shareholders fund in UPCL.

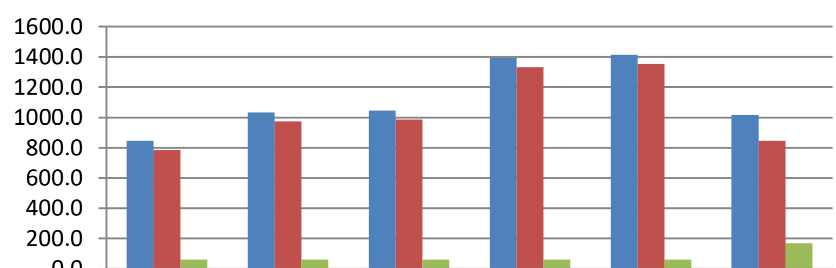
Liabilities

Liabilities are the money that UPCL owes to outside parties, from bills it has to pay to suppliers to interest on bonds it has issued to creditors to rent, utilities and salaries. Current liabilities of UPCL include liabilities that are due within one year and are listed in order of their due date. Long-term liabilities are due at any point after one year.



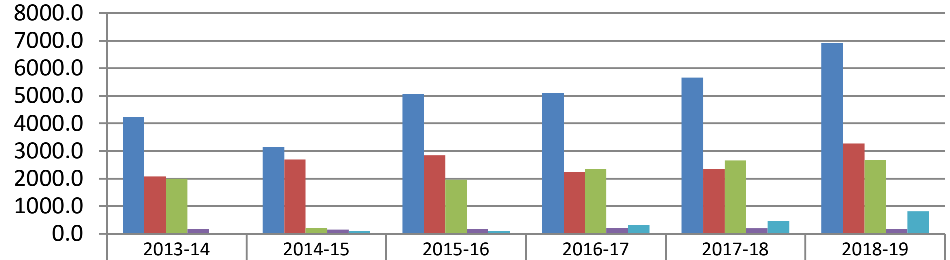
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total liabilities	5079.3	4177.8	6110.8	6500.4	7079.4	7932.3
Total non current liabilities	848.0	1033.8	1047.8	1393.0	1415.9	1017.5
Total current liabilities	4231.4	3143.9	5062.9	5107.4	5663.5	6914.8

- The total liabilities of UPCL for the year 2018-19 are 7932.3 crores which were 5079.3 crores in 2013-14 implying that the total liabilities have increased in the past 6 years.
- The current liabilities have major share in the total liabilities whereas the share of noncurrent liabilities is minor. The noncurrent liabilities as well as current liabilities have increased in the past six years



	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total non current liabilities	848.0	1033.8	1047.8	1393.0	1415.9	1017.5
Long term borrowings	786.4	972.3	986.3	1331.4	1354.3	848.1
Other long term liabilities	61.5	61.5	61.5	61.5	61.5	169.4

- The total noncurrent liabilities of UPCL for the year 2018-19 are 1017.5 crores which were 848.0 crores in 2013-14 implying that the total liabilities have increased in the past 6 years.
- The long term borrowings have major share in the total noncurrent liabilities whereas the share of other long term liabilities is minor. The long term borrowings have increased till 2017-18 however decreased in the year 2018-19. The other long term liabilities remained constant upto 2017-18 but increased in the year 2018-19 to 169.4 crores.

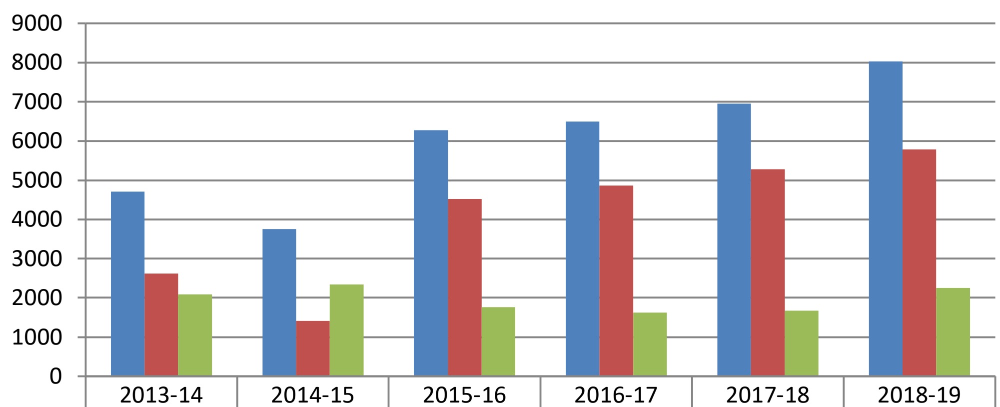


	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total current liabilities	4231.4	3143.9	5062.9	5107.4	5663.5	6914.8
Trade paybles	2070.1	2691.6	2841.9	2231.5	2355.1	3274.0
Other current liabilities	1989.8	205.1	1964.0	2355.4	2659.5	2676.7
Short term provisions	171.2	152.8	158.8	206.5	196.1	160.6
Short term borrowings	0.2	94.5	98.3	314.0	452.9	803.4

- The total current liabilities of UPCL for the year 2018-19 are 6914.80 crores which were 4231.40 crores in 2013-14 implying that the total liabilities have increased in the past 6 years.
- The trade payables have a major share in the total current liabilities of UPCL whereas the share of short term borrowings is minor. The trade payables have increased in past 6 years. The other current liabilities and short term provisions of UPCL have decreased in the past 6 years.
- The short term borrowings have increased considerably in past years.

II. Assets

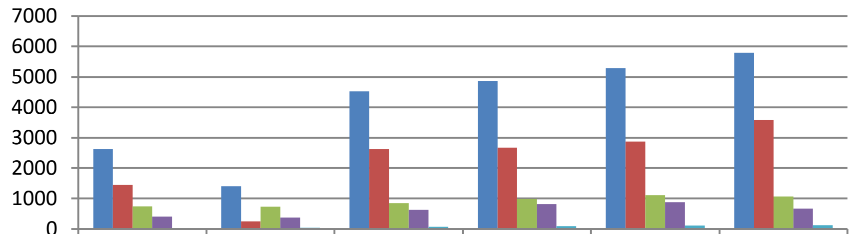
Within the assets segment of balance sheet of UPCL, accounts are listed from top to bottom in order of their illiquidity – that is, the unease with which they can be converted into cash. They are divided into non-current or long-term assets which cannot be converted to cash in one year or less; and current assets,, which can be converted to cash in one year or less .



	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total Assets	4706	3752	6278	6490	6951	8029
Total Non Current Assets	2618	1409	4522	4868	5279	5784
Total current Assets	2087	2343	1757	1623	1672	2245

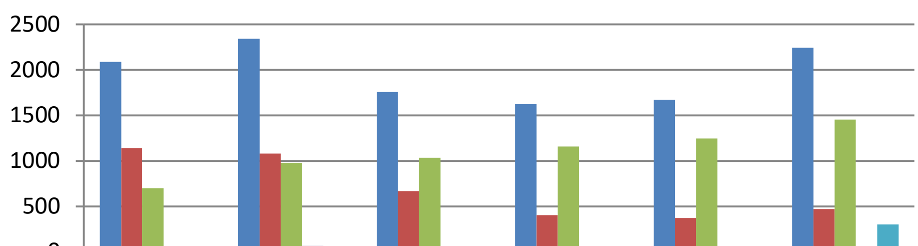
- The total assets of the UPCL have increased in the past years. The total noncurrent assets have a major share in the total assets of the UPCL whereas the current share has a minor share in the total assets of

UPCL.



	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total Non Current Assets	2618	1409	4522	4868	5279	5784
Tangible and intangibe assets	1447	252	2623	2675	2871	3584
Long term loans and advances	748	733	842	978	1104	1068
Capital work in progress	412	383	630	813	878	664
Deffered tax assets	12	41	71	94	111	123

- The total noncurrent assets of UPCL for the year 2018-19 are Rs 5784.00 crores which were Rs 2618.00 crores in 2013-14 implying that the total assets have increased in the past 6 years.
- The total tangible & intangible assets of UPCL for the year 2018-19 are Rs 3584.00 Crore which were Rs 1447.00 Crore in 2013-14 implying that the total assets have increased in the past six year.
- The Long terms loans and Advances of UPCL for the year 2018-19 are Rs 1068.00 Crore which were Rs 748.00 Crore in 2013-14 implying that the total assets have increased in the past six year.
- The Capital work in Progress of UPCL for the year 2018-19 are Rs 664.00 Crore which were Rs 412.00 Crore in 2013-14 implying that the total assets have increased in the past six year.
- The differed tax assets of UPCL for the year 2018-19 are Rs 123.00 Crore which were Rs 12.00 Crore in 2013-14 implying that the total assets have increased in the past six year.

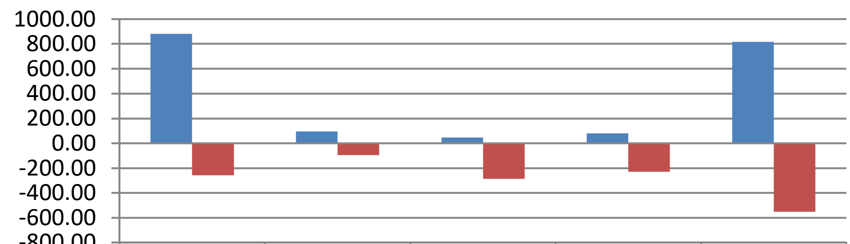


	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total current Assets	2087	2343	1757	1623	1672	2245
Trade receiveables	1139	1079	666	403	368	469
Cash and cash equivalent	697	975	1032	1155	1245	1454
Short term loans and advances	39	63	12	15	20	21
Other current assets	0	0	46	50	40	301

- The total current assets of UPCL for the year 2018-19 are Rs 2245.00 Crores which were Rs 2087.00 Crores in 2013-14 implying that the total assets have increased in the past 6 years.
- The Trade Receivable of UPCL for the year 2018-19 are Rs 469.00 Crore which were Rs 1139.00 Crore

in 2013-14 i.e decreasing trend implying that the total collection efficiency increased in the past six year.

- The Cash & cash equivalent of UPCL for the year 2018-19 are Rs 1454.00 Crore which were Rs 697.00 Crore in 2013-14 i.e increasing trend implying that the liquidity increased in the past six year.
- The Short term loan & advances of UPCL for the year 2018-19 are Rs 21.00 Crore which were Rs 39.00 Crore in 2013-14 i.e decreasing trend implying that the total current assets increased in the past six year.
- The other current assets of UPCL for the year 2018-19 are Rs 301.00 Crores which were Rs 46.00 Crores in 2015-16 implying that the total assets have increased in the past 4 year.



	2015	2016	2017	2018	2019
Government grants towards capital work	881.09	94.67	45.85	81.33	816.89
Loss from balance sheet	-259.71	-95.63	-288.78	-229.22	-553.23

Financial viability of UPCL

On the basis of ratio analysis ranks were assigned to each financial ratio. The ranks of each financial ratio are summarised below. The table below also summarises the scale used for ranking each financial ratio and also presents the mean value of each financial ratio. The ranks so assigned are used further in analysing the financial viability on risk analysis and solvency areas of UPCL.

- Capital and Financial structure of UPCL is analysed on the basis of 6 ratio i.e. Capital gearing ratio, Total assets to debt ratio, Proprietary ratio, Interest coverage ratio , debt equity ratio and book value per share. The mean value of Capital gearing ratio is 1.29 i.e. evenly geared, mean value of total assets to debt ratio is 0.22 i.e. low degree of leverage, high financial flexibility, mean value of Proprietary Ratio is negative 1.49 i.e. poor financial position, mean value of interest coverage ratio is 0.29 i.e. high risk, mean value of debt equity ratio is 1.20 i.e. medium risk, mean value of book value per share is negative 686.885 i.e. decreasing value of UPCL.
- Liquidity of UPCL is analysed on the basis of the three ratio i.e. Current ratio, Liquid ratio and Absolute liquid ratio. The mean vale of current ratio is 0.38 i.e. poor liquidity positions, mean value of liquid ratio is 0.36 i.e. weak liquidity position and mean value of absolute liquid ratio is 0.21 i.e. also weak liquidity positions of UPCL.

A composite 3 point scale was prepared again to assign final scores to the risk analysis and Solvency position of UPCL. The final scores were assigned on the basis of modal value of scores for each financial ratio.

Scale			
Modal Value of Rank	**Position**	**Interpretation**	**Result**
1	Strong	Strong Financial and Capital Structure	Strong Financial Viability of UPCL
2	Average	Weak Financial and Capital Structure	Weak Financial Viability of UPCL
3	Poor	Poor Financial and Capital Structure	Poor Financial Viability of UPCL

1 modal value of rank of refers to a strong position interpreted as Strong Capital and Financial Structure resulting Strong Financial Viability of UPCL whereas 3 modal value of rank refers to a poor position interpreted as Poor Capital and Financial Structure resulting Poor Financial Viability of UPCL.

The financial viability of UPCL on the basis of Risk Analysis and Solvency Analysis is presented below.

Financial Viability of UPCL (on basis of Risk Analysis and Solvency Analysis)			
Ratio		**Position**	**Rank**
Capital Gearing Ratio		Average	2
Total Assets to Debt ratio		Poor	3
Proprietary Ratio		Poor	3
Interest Coverage Ratio		Poor	3
Debt Equity Ratio		Average	2
Book value Per Share		Poor	3
Current Ratio		Poor	3
Liquid ratio		Average	2
Absolute Liquid ratio		Average	2
Modal Value of Rank	**3**		
Position	**Poor**		
Interpretation	Poor Financial and Capital Structure		
Result	Poor Financial Viability of UPCL		
Scale			
Modal Value of Rank	**Position**	**Interpretation**	**Result**
1	Strong	Strong Financial and Capital Structure	Strong Financial Viability of UPCL
2	Average	Weak Financial and Capital Structure	Weak Financial Viability of UPCL
3	Poor	Poor Financial and Capital Structure	Poor Financial Viability of UPCL

Modal value of ranks for Financial Viability of UPCL (on basis of Risk Analysis and Solvency Analysis) is 3 implying poor position of UPCL which is interpreted as poor capital and financial structure of UPCL. Poor financial and capital structure of UPCL further implies poor financial viability of UPCL.

Conclusion

To summarise the financial management at UPCL whose objective is to ensure financial viability of UPCL was analysed in the present study on the basis of key financial viability areas and the results are presented below.

S.No	Financial Viability Parameters	Financial Viability Areas	Interpretation	Result
1	Financial viability includes the ability of the organization to raise funds required to meet its functional requirements in the short run, medium and long term.	Risk Analysis & Solvency Analysis	Poor Financial and Capital Structure of UPCL	Poor Financial Viability of UPCL
2.	Financial viability is the ability of UPCL to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining 100% service levels.	Profitability Analysis Efficiency Analysis Return on Assets	To be analyzed in Study VI	

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