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A COMPARATIVE ANALYSIS OF FINANCIAL PERFORMANCE OF INDIAN TELECOM COMPANIES

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ABSTRACT
Telecommunication sector is globally regarded as one of the driving forces for overall economic development of a nation. it is one of the main support services needed for fast growth and modernization in different sectors of economy. The Indian telecommunication industry has a rapid growth in the world. Government policies and regulatory framework implemented by telecom regulatory authority of India (TRAI) has provided an open competitive environment for service providers in India. This has made the sector more competitive and increase the accessibility of telecommunication services at affordable tariffs to the consumers. it is widely accepted that financial performance of a firm depends on some key financial factors i.e. , turnover, profits, goodwill and effective utilization of assets. To analyze performance, ratios, the indicators, are normally used to find out the financial health of the company. Financial performance analysis is the process of determining the operating and financial characteristics of a company from its accounting and financial statements. The goal of such analysis is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports. The analyst attempts to measure the firm's liquidity, profitability and other indicators that the business is conducted in a rational and normal way.

KEY WORDS: Efficiency, ratios, profitability, liquidity, leverage, F-test, solvency

Introduction

Indian telecom sector and mobile telephony in particular has caught the imagination of India by revolutionizing the way we communicate, share information, and through its staggering growth helped millions stay connected. This growth, however, has and continues to be at the cost of the climate powered by an unsustainable and inefficient model of energy generation and usage.

Telecommunication services are globally recognized as one of the driving forces for overall economic development in a nation. As telecom industry is driven by 3G and 4G services, it is expected that there will be huge machine to machine growth in India in 2016-17, according to UST global. There is also a lot of scope for growth of M2M services in the government's ambitious US$ 1.1billion smart city program. The rapid strides in the telecom sector have been facilitated b the liberal policy of the government of India that provide easy market access for telecom equipment and a fair regulatory framework for offering telecom services at affordable prices. According to a study by GSMA, it has been expected that smart phones will account for two out of every three mobile connections globally by 2020 and india is al st to become the fourth largest smart phones market. The number of telephone subscribers in india increased from 957.61 million at the end of September,2014 to 962.63 million at the end of October, 2014,thereby showing a monthly growth rate of 0.52%. Telecommunication has supported the socioeconomic development of India and has played a significant role to narrow down the rural-urban digital divide to some extent. It also has helped to increase the transparency of governance with the introduction of e-governance in India. The government has pragmatically used modern telecommunication facilities to deliver mass education programmes for the rural folk of India. In India both public sector and private sector shares substantial stake in telecom sector, generally the new private player requires a high degree of asset allocation and heavy working capital and existing ones allocates heavy funds for sustaining and improving their market share. As the industry calls for huge fund allocation which makes necessary for the companies to manage all financial affairs in well structured and organized manner to activate the dormant financial allocations, financing the deficit or disposal of surplus. the overall tele-density in india increased from 76.75 at the end of September, 2014 to 77.07 at the end of October, 2014. The urban tele density increased from 148.07 to 148.10 and rural tele-density increased from 44.96 to 45.39 in the month of October,2014. The share of urban subscribers and rural subscribers at the end of October,2014 were 59.27% and 40.73% respectively.

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Statement of the problem:

there is a lot of sectors in which it is generally visible that the manner of utilization of funds in private sectors is better than public sectors this study is an attempt to draw an appropriate conclusion. In India telecom industry represents an integral part of Indian economy. Since the industry faces ups and downs over the period of time, the companies in the industry have reported reduction in profit and in some rare cases even loss. As and when the industry is caught in a vicious down cycle, the firms have rendered operations unviable and they face threats to their viability and sustainability which directly impacts their financial health and if the problem didn‟t get checked with in the given timeframe by applying adequate financial management tool so it definitely affects the organization from its depth.

Literature Review:

There is a non – systematic literature review is taken to find out the financial ratios included in articles in peer-review journals, industry publications, and articals in magazines and newspapers. Articles published prior to 2005 were excluded from the searches in order to ensure that only the most recent studies were included. This exclusion was important because of the many changes in telecom since 2005 and the likely lower relevance of articles prior to these changes. Ratios were selected from the articles if results showed that they were statistically significant in explaining a dimension of Telecom Company‟s financial performance, such as profitability or financial distress. To identify ratios in industry publication, the websites of various organizations were reviewed. Some of the major literature reviewed is –

Mathuva (2009*)*: examined the influence of working capital management components on corporate profitability by using a sample of 30 firms listed on Nairobi Stock Exchange for the periods 1993-2008. He used Pearson and Spearman‟s correlations, the pooled ordinary least squares and the fixed effects regression models to conduct data analysis. The key findings of his study were that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and profitability, there exists a highly significant positive relationship between the period taken to convert inventories to sales and profitability and there exists a highly significant positive relationship between the time it takes for firms to pay its creditors and profitability

(Rajesh and Ramana Reddy, 2011): Management of working capital in terms of liquidity and profitability management are essential for sound financial recital as it has a direct impact on profitability of the company.

Campbell (2008) constructed amultivariate prediction model that estimates the probability of bankruptcy reorganization for closely held firms. Six variables were used in developing the hypotheses and five were significant in distinguishing closely held firms that reorganize from those that liquidate. The five factors were firm size, asset profitability, the number of secured creditors, the presence of free assets, and the number of undersecured secured creditors. The prediction model correctly classified 78.5% of the sampled firms. This model is used as a decision aid when forming an expert opinion regarding a debtor's likelihood of rehabilitation.

Rekha Pai: dealt with the prediction of industrial sickness using multiple discriminate analyses.

The data set constitutes 21 financial ratios of 34 Indian sick companies in 200001 and 38 contemporary non sick companies, both selected irrespective of size and industry category 3 years prior to sickness. The multiple discriminate analyses (MDS) showed greater accuracy in predicting industrial sickness up to three years in advance. The model was validated further using a test model, while exhibited very high predictive accuracy of the proposed model.

(Eljelly, 2004): The crucial part in managing working capital is required maintaining its liquidity in day-to-day operation to ensure its smooth running and meets its obligation.

(Panwala, 2009): Ultimate goal of profitability can be achieved by efficient use of resources. It is concerned with maximization of shareholders or owners wealth. It can be attained through financial performance analysis. Financial performance means firm's overall financial health over a given period of time.

Altmanand Eberhart (1994): reported the use of neural network in identification of distressed business by the Italian central bank. Using over 1,000 sampled firms with 10 financial ratios as independent variables, they found that the classification of neural networks was very close to that achieved by discriminate analysis. They concluded that the neural network is not a clearly dominant mathematical technique compared to traditional statistical techniques.

Objectives of the study:

1. To analyze the financial performance of the company using the ratio's.

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2. To assess the liquidity management efficiency.
3. To investigate the relationships between liquidity and solvency.
4. To know the deviation in private and public sector telecom companies, if any.
5. To observe the financial performance position and areas of weakness, if any.

Hypothesis of the study:

The study has been made to test the following hypothesis with reference to telecom industry In India.

$H0_1$: Current asset to current liability ratio is uniform in the sample units.

$H0_2$: Fixed Asset to total turnover ratio is uniform in the sample units.

$H0_3$: Debt to equity ratio is uniform in the sample units.

$H0_4$: Return on capital employed is uniform in the sample units.

Methodology of the study:

Data set:

The data used in the present study is acquired from various journals, DOT, TRAI and annual reports of telecom companies in India. The analysis is based on financial statements of the four telecom companies (both private and public) of indian economy.

Variables:

The present study carries out the issue of recognizing key variables that influence financial performance. All the variables stated below have been used to test the hypotheses of study.

Tool Used For Analysis:

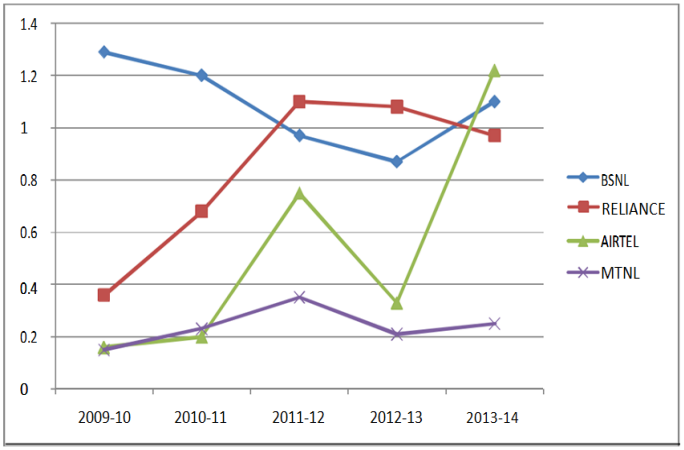
F-TEST: In analysis of variance, an F-test is used to test group variance against a null hypothesis, and is often used to determine whether any group of trials differs significantly from an expected value.

Test of Hypotheses - I

YEAR	BSNL	RELIANCE	AIRTEL	MTNL
2009-10	1.29	0.36	0.16	0.15
2010-11	1.20	0.68	0.20	0.23
2011-12	0.97	1.10	0.75	0.35
2012-13	0.87	1.08	0.33	0.21
2013-14	1.10	0.97	1.22	0.25
MEAN	1.09	0.83	0.53	0.23

TABLE 1: CURRENT RATIO

Above table depicts that over the course of five financial periods of study the mean of Current Ratio in BSNL is higher (1.09 times) than others. This shows that BSNL have sufficient current assets to meet short term operating needs, but even though we can"t claim it as an good position as current ratio of 1.09 times is much less than the standardized degree and leads to increase in possibility of solvency.



GRAPHICAL PRESENTATION OF CURRENT RATIOS

Now w apply F-test so

GRAND MEAN X= $\frac{1.09+0.83+0.53+0.23}{4}$ = 0.67

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	(Mean-Grandmean)2	(Mean-Grandmean)2	(Mean-Grandmean)2	(Mean-Grandmean)2
1.	**0.1764**	**0.0256**	**0.0196**	**0.1936**
2.	**0.1764**	**0.0256**	**0.0196**	**0.1936**
3.	**0.1764**	**0.0256**	**0.0196**	**0.1936**
4.	**0.1764**	**0.0256**	**0.0196**	**0.1936**
5.	**0.1764**	**0.0256**	**0.0196**	**0.1936**
Total	**0.882**	**0.128**	**0.098**	**0.968**

TABLE 2: Variance between samples

***Sum of squares between samples* = 2.076**

1.	**0.0400**	**0.2209**	**0.1369**	**0.0064**
2.	**0.0121**	**0.0225**	**0.1089**	**0.0000**
3.	**0.0144**	**0.0729**	**0.0484**	**0.0144**
4.	**0.0484**	**0.0625**	**0.0400**	**0.0004**
5.	**0.0001**	**0.0196**	**0.4761**	**0.0004**
total	**0.115**	**0.3984**	**0.8103**	**0.0216**

TABLE 3: Variance within samples

***Sum of variance within samples* = 1.3453**

Source of variation	Sum of squares	Degree of freedom	Mean square
Between	**2.0760**	**3**	**0.692**
Within	**1.3453**	**16**	**0.084**

TABLE 4: Analysis of variance

$$F = \frac{\text{Mean square between the sample}}{\text{Mean square within the sample}} = \frac{0.692}{0.084}$$

F = 8.2380

Interpretation: calculated value is more than the table value (3.23) at 5 % significance level. So Hypothesis is rejected.

Means there is significant difference in between performance in telecommunication companies on the basis of Current Ratio.

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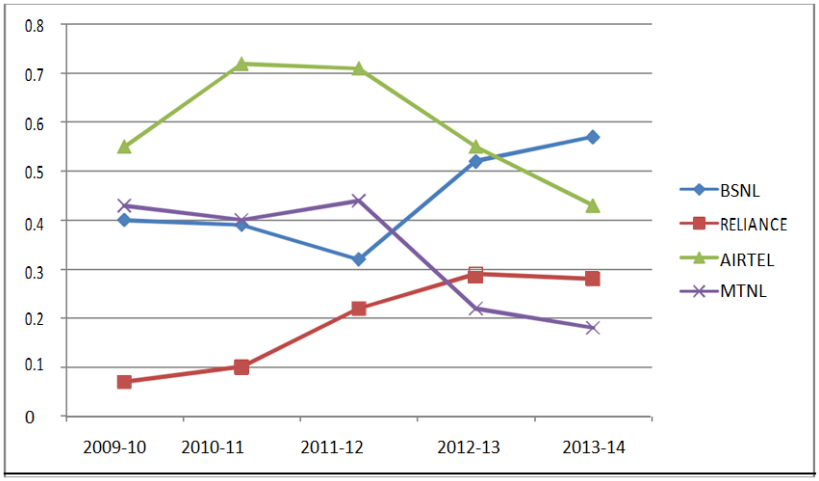
Test of Hypotheses - II

YEAR	BSNL	RELIANCE	AIRTEL	MTNL
2009-10	**0.40**	**0.07**	**0.55**	**0.43**
2010-11	**0.39**	**0.10**	**0.72**	**0.40**
2011-12	**0.32**	**0.22**	**0.71**	**0.44**
2012-13	**0.52**	**0.29**	**0.55**	**0.22**
2013-14	**0.57**	**0.28**	**0.43**	**0.18**
MEAN	**0.44**	**0.19**	**0.59**	**0.33**

TABLE 5: Fixed assets turnover ratios



GRAPHICAL PRESENTATION OF FIXED ASSETS TURNOVER RATIOS

Now we apply f-test, so; Grand mean X = $\frac{0.44+0.19+0.59+0.33}{4}$

X= 0.39

	(Mean-Grandmean)2	(Mean-Grandmean)2	(Mean-Grandmean)2	(Mean-Grandmean)2
1.	**0.0025**	**0.0400**	**0.0400**	**0.0036**
2.	**0.0025**	**0.0400**	**0.0400**	**0.0036**
3.	**0.0025**	**0.0400**	**0.0400**	**0.0036**

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4.	**0.0025**	**0.0400**	**0.0400**	**0.0036**
5.	**0.0025**	**0.0400**	**0.0400**	**0.0036**
Total	**0.0125**	**0.2000**	**0.2000**	**0.0180**

Table 6: Variance between samples

Sum of squares between samples = 0.543

1.	**0.0016**	**0.0144**	**0.0016**	**0.0100**
2.	**0.0025**	**0.0081**	**0.0169**	**0.0049**
3.	**0.0144**	**0.0009**	**0.0144**	**0.0121**
4.	**0.0064**	**0.0100**	**0.0016**	**0.0121**
5.	**0.0169**	**0.0081**	**0.0256**	**0.0225**
Total	**0.0418**	**0.0415**	**0.0601**	**0.0616**

Table 7: Variance within samples

***Sum of variance within samples* = 0.205**

Source of variation	**Sum of squares**	**Degree of freedom**	**Mean square**
Between	**0.543**	**3**	**0.181**
Within	**0.205**	**16**	**0.0128**

Table 8: Analysis of variance

$$F = \frac{\text{Mean square between the sample}}{\text{Mean square within the sample}}$$

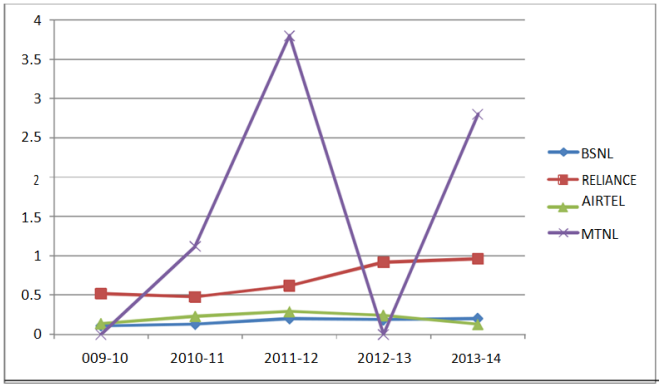
F= 14.14

Interpretation: calculated value is more than the table value (3.23) at 5 % significance level.
Then Hypothesis is rejected so, there is significant difference in between performance of telecommunication companies on the basis of Fixed *Asset Turnover*.

***Test Of Hypotheses* – III**

YEAR	BSNL	RELIANCE	AIRTEL	MTNL
2009-10	**0.11**	**0.52**	**0.14**	**0**
2010-11	**0.13**	**0.48**	**0.23**	**1.12**
2011-12	**0.20**	**0.62**	**0.29**	**3.80**
2012-13	**0.19**	**0.92**	**0.24**	**0**
2013-14	**0.20**	**0.96**	**0.13**	**2.80**
MEAN	**0.17**	**0.70**	**0.21**	**1.54**

Table 9: Debt to Equity ratio



GRAPHICAL PRESENTATION OF DEBT TO EQUITY RATIOS

Now we apply f-test, so; Grand mean

$$X = \frac{0.17+0.70+0.21+1.54}{4}$$

X= 0.655

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	(Mean-Grand mean)2	(Mean-Grand mean)2	(Mean-Grand mean)2	(Mean-Grand mean)2
1.	0.2352	0.0020	0.1980	0.7832
2.	0.2352	0.0020	0.1980	0.7832
3.	0.2352	0.0020	0.1980	0.7832
4.	0.2352	0.0020	0.1980	0.7832
5.	0.2352	0.0020	0.1980	0.7832
Total	**1.1760**	**0.0100**	**0.9900**	**3.916**

Table 10: Variance between samples

Sum of squares between samples = 6.092

1.	0.0036	0.0324	0.0049	2.3716
2.	0.0016	0.0484	0.0004	0.1764
3.	0.0009	0.0064	0.0064	5.1076
4.	0.0004	0.0484	0.0009	2.3716
5.	0.0009	0.0676	0.0064	1.5876
total	0.0015	0.2032	0.0190	11.6148

Table 11:Variance within samples

Sum of variance within samples = 11.8385

Source of variation	**Sum of squares**	**Degree of freedom**	**Mean square**
Between	6.092	3	2.0306
Within	11.8385	16	0.7399

$$F = \frac{\text{Mean square between the sample}}{\text{Mean square within the sample}}$$

F = 2.7444

Interpretation: calculated value is less than the table value (3.23) at 5 % significance level.

Then Hypothesis is accepted, as there is no significant difference in between performance in telecommunication companies on the basis of Debt to Equity ratio.

***Test Of Hypotheses* – IV**

YEAR	BSNL	RELIANCE	AIRTEL	MTNL
2009-10	-0.01	0.12	0.23	-0.31
2010-11	-0.06	0.13	0.16	-0.25
2011-12	-0.10	0.13	0.13	-0.33
2012-13	-0.10	0.12	0.12	-0.99
2013-14	-0.09	0.11	0.13	0.73
MEAN	-0.07	0.12	0.15	-0.23

Table 13:Return on total capital employed

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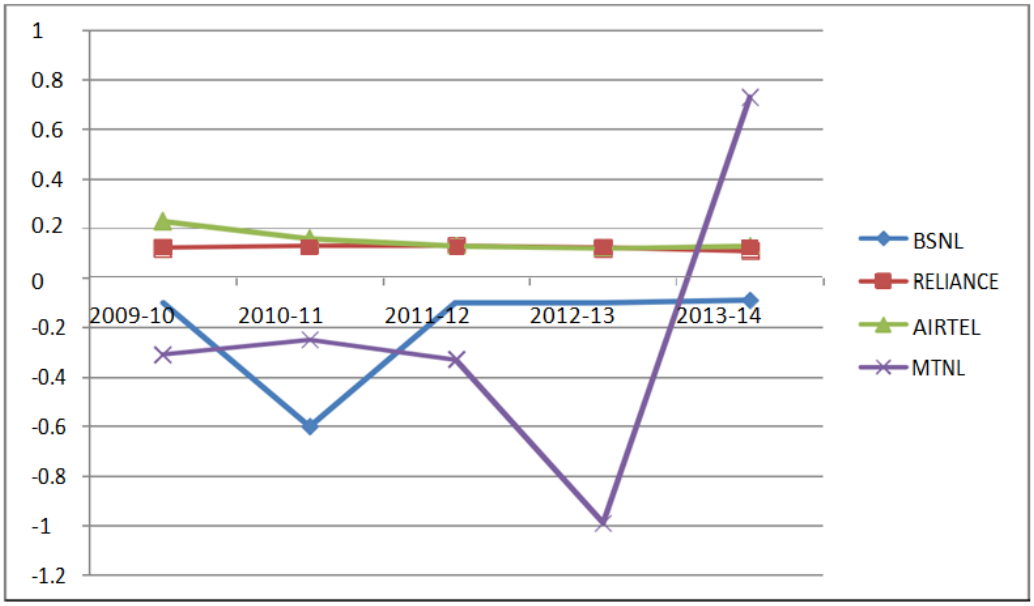

GRAPHICAL PRESENTATION OF RETURN ON TOTAL CAPITAL EMPLOYED

Now we apply f-test, so; Grand mean X= **-0.03**

	(Mean-grandmean)2	**(Mean-grandmean)2**	**(Mean-grandmean)2**	**(Mean-grandmean)2**
1.	0.0100	0.0081	0.0144	0.0676
2.	0.0100	0.0081	0.0144	0.0676
3.	0.0100	0.0081	0.0144	0.0676
4.	0.0100	0.0081	0.0144	0.0676
5.	0.0100	0.0081	0.0144	0.0676
Total	0.0500	0.0405	0.0720	0.338

Table 14: Variance between samples

Sum of squares between samples **= 0.5005**

1.	0.0036	0.0000	0.0064	0.0064
2.	0.0001	0.0001	0.0001	0.0004
3.	0.0009	0.0001	0.0004	0.0100
4.	0.0009	0.0000	0.0001	0.5776
5.	0.0004	0.0001	0.0004	0.9216
Total	0.0059	0.0003	0.0074	1.5160

Table 16: Variance within samples

Sum of variance within samples= 1.5296

Source of variation	**Sum of squares**	**Degree of freedom**	**Mean square**
Between	0.5005	3	0.1668
Within	1.5293	16	0.0955

Table 17: Analysis of variance

$$F = \frac{\text{Mean square between the sample}}{\text{Mean square within the sample}}$$

F = 1.7465

Interpretation: calculated value is less than the table value (3.23) at 5 % significance level. Than Hypothesis is accepted, as there is no significant difference in between performance in telecommunication companies on the basis of RETURN ON CAPITAL EMPLOYED.

Conclusion:

Ratios analysis has a crucial importance in financial management decision making. financial soundness could be achieve by company that manage the tradeoff between liquidity and solvency management. The purpose of this study is to investigate the effective liquidity management to support companies while meeting its short term operational or working requirements where as analysis of solvency, fixed assets and return on capital employed concentrates on long term performance. A descriptive statistics discloses that liquidity and solvency position in both long and short term is very dissatisfactory and companies soon have to opt for its correction. F-tests confirm a lower degree of association between and within financial variables. Thus, company manger should concern on financial management, especially unexplained variables in purpose of creation shareholder wealth.

Long-term solvency in case of telecom companies in india is lower which shows that companies relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. Financial stability ratios in the vein of debt to net worth ratio in case of bsnl have showed a downward trend and consequently the financial stability has been decreasing at an intense rate. The Indian Telecom industry will witness an increase in the market share.

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