

## Chapter No. 2

### Literature Review

#### 2.1 Introduction

Telecommunications is one of the most important and critical sector of the economy as growth in telecommunications sector has positive impact on the GDP growth. Besides contributing to about 3% to India's GDP, Telecommunications, along with Information Technology, has greatly accelerated the growth of the economic and social sectors (Source: NTP-2012 announced by DoT). Since the launch of telecommunication services in India, way back in nineteenth century, these were being provided by central government or its PSUs till 1995. In order to push the growth of telecom in value added service like cellular mobile service, government allowed entry of private sector in mobile telephony. Subsequently, other segments of telecommunication services like fixed telephony, national long distance service, international long distance service, internet etc. were gradually opened for private participation. During last 15 years, the telecommunication sector has witnessed rapid growth due to ever increasing demand for telecom services, exponential growth of internet and better investment climate created by liberal policies of the government for the sector.

India is currently having the world's second-largest telecommunications network and has witnessed spectacular growth in the last fifteen years. The liberal and reformist policies of the Government of India have been instrumental along with strong consumer demand in the rapid growth in the Indian telecom sector. Subramanian (2008) traced the evolution of India's Telecommunications policies from its colonial days to the present time with critical focus on evolution of telecommunications policies in India, the philosophy behind the

policies, their successes and failures over the years, current trends and the future outlook for telecommunications in India.

The government has enabled easy market access to telecom equipment manufacturers and a fair and proactive regulatory framework that has ensured availability of telecom services to consumer at affordable prices. The deregulation of foreign direct investment (FDI) norms has made the sector one of the fastest growing and a top five employment opportunity generator in the country. Baruah and Baruah (2014) narrated the history and evolution of telecommunication sector in India and studied the present trends and future growth opportunities of the Telecom Sector in India. The study concluded that the growth and development of Telecom sector of India has made it a key contributor in India's economic and social up gradation. Every functional division and service provider of Telecom Sector of the country is trying to provide world class telecom infrastructure in its area of operation to give services to its customers and so, helping the country to progress in the global scenario.

## **2.2 Literature review**

For the financial year 2013-14, the total revenue generated by telecommunication service providers was of the order of Rs. 2,33,815/- Crores registering a growth of 9.98% over the previous financial year [Source: TRAI annual report (2013-14)]. Presently, growth of telecommunication services in India is being fuelled by private sector companies but public sector companies like Bharat Sanchar Nigam Limited and Mahanagar Telephone Nigam Limited are also not lagging behind and are playing their part in the growth of the sector apart from acting as counter balancing force in a dynamic market. The high growth of the sector during last decade and so has attracted the attention of research scholars and academicians and many studies have been carried out from time to time for evaluating financial performance of various telecom companies. Some studies have focused on

financial performance of private sector companies while in some studies, financial performance of BSNL has been at centre stage. Some studies have centered around comparing financial performance of private sector companies with public sector mainly BSNL.

Sharma, Momaya and Manohar (2010) attempted to evaluate the competitiveness of the telecom industry in India focusing on the efficiency. The study used input oriented data envelopment analysis to measure the relative technical and scale efficiency of ten service providers. Further, using output oriented model, the efficiency analysis was also extended to 23 service circle areas. The study concluded that Bharti Airtel, Vodafone Aircel and BSNL were the most efficient service providers. On the hand MTNL, Reliance and Tata Teleservices had shown the lowest efficiency levels. Findings for the analysis performed on circles showed that Delhi, Himachal Pradesh and North East are the circles with maximum efficiency levels, whereas Rajasthan, Bihar, West Bengal, Uttar Pradesh (East), Tamil Nadu and Kerala reported lowest efficiency levels.

Chellasamy and Sridevi (2011) compared the profitability and liquidity performance of Bharat Sanchar Nigam Limited and Bharati Airtel for a period from 2000-01 to 2010-11 by calculating profitability ratios and liquidity ratios. Statistical tools such as mean, standard deviation, coefficient of variation and correlation were also used to draw inferences. The study has indicated that there is less consistency in gross profit ratio, net profit ratio, return on asset ratio and return on equity ratio for BSNL. On liquidity front, BSNL has shown consistency in liquidity ratio and absolute liquidity ratio. The study also mentions that for Baharti Airtel limited, there was positive correlation between (i) current ratio and liquidity ratio (0.736); (ii) liquidity ratio and absolute liquidity ratio (0.762) and (iii) between

inventory to net working capital to absolute liquidity ratio (0.849). The Bharat Sanchar Nigam Limited has positive correlation in the current ratio and liquidity ratio. The study has mentioned that even though sales are high, the profit shows a decreasing trend in the case of Bharati Airtel limited when compared to Bharat Sanchar Nigam Limited. The study has concluded that profitability and liquidity analysis of Bharat Sanchar Nigam Limited has good performance when compared to Bharati Airtel Limited.

Muthusamy (2012) studied the liquidity, profitability and turnover performance of selected private telecommunication companies in India for carrying out their comparative analysis over a period of five years from 2005-06 to 2009-10. The study utilised two way ANOVA and other statistical measures to test the sets of Null Hypothesis. The six companies selected for the study were:

- Bharti Airtel
- Reliance Communication
- Idea Cellular
- Tata Communication
- Tata Teleservices
- Tata Teleservices Maharashtra Limited (TTML)

Ananthi and Sriram (2012) carried out a study covering a period of five years from 2004-05 to 2008-08 for evaluating performance of six telecom companies, namely

- Bharati Airtel Limited
- Idea Cellular Limited
- Reliance Communications Limited
- Bharat Sanchar Nigam Limited
- Tata Communications Limited

- Mahanagar Telephone Nigam Limited

The study considered financial ratios as the tool for measurement of the company's performance and utilized taxonomy method, a statistical tool, in ranking the companies based on specific criteria. The study has indicated that among the liquidity ratios, BSNL stands on top of all these companies while Reliance Communications Limited occupies the first position in the turnover ratios. The study further revealed that Bharati Airtel was at top position when comparing the profitability position as well as on return on net worth and return on capital employed parameters.

Thomas and Damarla (2012) carried out a case study over the period 2002-03 to 2010-11 to assess the critical factors which affected the profitability of the BSNL through various financial ratios with analysis from stakeholder's point of view. The study has concluded that financial strength which BSNL has built up over the years will stand in good stead during the period of transition which it is facing presently. Authors have recommended a deliberate movement towards innovative projects that successfully deliver value to today's subscribers-especially applications related to data and e-commerce etc.

Pandey, Verma and Jain (2013) examined overall financial efficiency of selected telecom companies namely BSNL, Bharati Airtel, Reliance Communication and MTNL during a period of 2008 to 2012. The study observed financial performance position and areas of weakness apart from investigating the relationship between liquidity and solvency. The study used F-test to establish that there is significant difference between performance in these telecommunication companies on the basis of current ratio, fixed asset turnover, debt to equity ratio and return on equity. The authors have, further, stated that financial management is of crucial importance in management decision making and optimal

financial soundness could be achieved by company that manage the trade off between liquidity and solvency management.

Vijayalakshmi and Sailaja (2013) carried out a study over the period of 2007-08 to 2011-12 for examining financial health of BSNL, Bharati Airtel and Reliance Communications by calculating various ratios and by applying Z-score model. The Z scores formula used to evaluate the financial health of a company is as follows:

$$Z = 1.2 A + 1.4 B + 3.3 C + 0.6 D + 0.99 E$$

Where Z is the overall index

$$A = \text{Working Capital} / \text{Total Assets} * 100$$

$$B = \text{Retained Earnings} / \text{Total Assets} * 100$$

$$C = \text{EBIT} / \text{Total Assets} * 100$$

$$D = \text{Market value of equity} / \text{Book value} * 100$$

$$E = \text{Sales} / \text{Total Assets}.$$

In the study, Z-scores of BSNL, Bharati Airtel and Reliance Communications have been calculated and compared with each other. The study has drawn conclusions about comparative financial position and health of these companies. It has illustrated that financial distress is very high in BSNL and unless necessary measures are taken, there is higher possibility to the company to collapse financially. It further mentions that Bharati Airtel has placed itself in healthy zone and its financial position is viable while financial position of Reliance Communications is uncertain to predict and firm should take all corrective measures to be in safe zone.

Pawar and Nayak (2013) analysed financial position of BSNL covering data for nine years from 2002-03 to 2010-11. The financial and liquidity position of BSNL was evaluated by

the financial technique of ratio analysis and almost all the major and relevant ratios have been evaluated. The study has concluded that liquidity position of BSNL was strong but long term solvency is lower. Financial stability ratios for BSNL have shown a downward trend and consequently the financial stability has been decreasing at an intense rate. The study has recommended that the (i) company has to improve upon its current and liquidity position further and (ii) management should find ways and means to use the existing asset base to its fullest value.

Prakash and Mathew (2014) did a study on financial evaluation of performance of telecommunication sector with reference to Omantel and Nawras in Sultanate of Oman by using data from financial statements for the years 2010 to 2013. The study used financial ratios, coefficients of correlation and market share and concluded that Omantel is stronger and better than Nawras in respect of short term liquidity, profitability, operating profit, market share and EBIDTA. The study has concluded that these indicators are showing declining trends in the performance of both the companies. It has been further mentioned that Omantel needs to go for favorable financial leverage in its capital mix to improve its earnings while Nawaras, can go for optimum capital mix in order to maximize the value of the firm.

Rajput and Shah (2015) evaluated liquidity position and overall profitability of Bharat Sanchar Nigam Limited and Idea Cellular Limited over a period of five years from 2009-10 to 2013-14. The liquidity position and profitability condition of two companies have been compared by evaluating current ratio; gross profit margin, net profit margin, earnings per share and return on shareholder's funds respectively. Bharat Sanchar Nigam Limited has better liquidity position than the Idea. On profitability condition, Idea has done better than Bharat Sanchar Nigam Limited as BSNL had been making continuous losses during

the study period. It has been concluded that financial performance of Idea Cellular Limited is better than BSNL.

Raza (2015) attempted to analyse the financial performance of Indian telecom industry specially focused on BSNL and Bharati Airtel comparatively for a period from 2008-09 to 2012-13. Liquidity ratios, profitability ratios and solvency ratios were derived to evaluate the financial performance of both the companies. Independent sample t-test was used to test the hypotheses. Through the study, it has clearly been established that financial performance of Bharati Airtel is far better than Bharat Sanchar Nigam Limited. Study has recommended that BSNL should be run on a commercial principal for its sustenance and business growth. It has also been further mentioned that it is difficult to turn around the BSNL that have been posting losses for the last four to five years and have a miniscule market share of 12 percent but it is not impossible.

Gupta (2015) carried out a study to know financial condition of the BSNL over the years 2004 to 2008 with the help of trend analysis, comparative balance sheet and liquidity and profitability ratios. The study found that company follows aggressive policy of managing liquidity and company has sufficient liquidity assets to satisfy its short term liabilities. It is further mentioned that profits of the company are decreasing year by year due to maintaining high liquidity.

The existing literature is replete with information related to financial performance of BSNL over the different period of years. However, no study seems to have been undertaken to find out areas of concern by evaluating the financial performance of BSNL covering a period of 10 years in which the company has seen few years of high profit making and few years of huge losses. The analysis of financial statements/annual reports



helps in unearthing areas of concern in the financial performance of the firm so that management can take corrective actions accordingly. As BSNL had been making huge profits initially followed by last few years of heavy losses, it would be interesting to see where things have gone wrong for BSNL and what are the areas of concern as far as financial performance of BSNL is concerned over this period. The present study aims to examine the financial performance of BSNL over a period of 10 years through financial statements like balance sheet, profit and loss statement, cash flow statement and annual reports to identify areas of concern; and recommend the remedial measures for way forward and fill the gap in the literature in this regard.