

## DEBT MANAGEMENT PRACTICES IN TELECOM SECTOR IN INDIA – A STUDY OF SELECT COMPANIES

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### ABSTRACT

*In the recent past, telecommunications has weathered the downturn and subsequent economic uncertainty and volatility relatively well compared to many other sectors. The financial health of companies is usually an index of the financial soundness of the industry. Therefore, by conducting an industry analysis, owners of the companies can formulate the strategies to help the business growth and development in the future period of time. The Z score model can be used to capture the predictive viability of a firm's financial condition by using a combination of five financial ratios which ultimately depicts a score. This score can be used as an effective tool to analyze the financial health and credit worthiness of a company. For this regard the study is focuses on telecom sector by selecting both the public and private sector telecom companies like BSNL, Bharthi Airtel and R-Com for the period of five years i.e., from 2010-11 to 2014-15.*

**Keywords:** Financial Ratios, Debt, Financial Health, Viability of a firm's.

### Introduction:

Telecom is one of the fastest-growing industries in India. Today India stands as the second-largest telecommunications market in the world. The mobile phone industry in India would contribute US\$ 400 billion in terms of gross domestic product (GDP) of the country in 2014. This sector which is growing exponentially is expected to generate about 4.1 million additional jobs by 2020, as per Grouped Special Mobile Association (GSMA). In the period April 2000 to January 2014, the telecom industry has got in foreign direct investments (FDI) of about US\$ 59,796 million, which is an increase of 6 per cent to the total FDI inflows in terms of US\$, as per report published by Department of Industrial Policy and Promotion (DIPP). India's global system for mobile (GSM) operators had 4.14 million rural subscribers as of January 2014, bringing the total to 285.35 million. Data traffic powered by third generation (3G) services grew at 146 per cent in India during 2013, higher than the global average that saw usage double, according to an index study by Nokia Siemens Networks (NSN). India's Smartphone market grew by 171 per cent in 2013, to 44 million devices from 16.2 million

in 2012, as per research firm IDC India. The increasing popularity of bring-your-own-device (BYOD) in the workplace is further adding momentum to the Smartphone market. Indian telecom industry has grown from a tele-density of 3.58% in March 2001 to 74% in June 2013. This great leap in both numbers of consumers as well as revenues from telecom services has not only provided sufficient contribution in Indian GDP growth but also provided much needed employment to India's youth.

Although the Indian telecom industry is one of the fastest-growing industries in the world, the current tele-density or telecom penetration is extremely low when compared with global standards. India's tele-density of 36.98% in 2015 financial year is amongst the lowest in the world. Further, the urban tele-density is over 80%, while rural tele-density is less than 20%, and this gap is increasing. As majority of the population resides in rural areas, it is important that the government takes steps to improve rural tele-density. No doubt the government has taken certain policy initiatives, which include the creation of the Universal Service Obligation Fund, for improving rural telephony. These measures are expected to improve the rural tele-density and

bridge the rural-urban gap in tele-density. Indian telecom sector is more than 165 years old. Telecommunications was first introduced in India in 1851 when the first operational land lines were laid by the government near Kolkata (then Calcutta), although telephone services were formally introduced in India much later in 1881. Further, in 1883, telephone services were merged with the postal system. In 1947, after India attained independence, all foreign telecommunication companies were nationalized to form the Posts, Telephone and Telegraph (PTT), a body that was governed by the Ministry of Communication. The Indian telecom sector was entirely under government ownership until 1984, when the private sector was allowed in telecommunication equipment manufacturing only. The government concretized its earlier efforts towards developing R&D in the sector by setting up an autonomous body – Centre for Development of Telemetric (C-DOT) in 1984 to develop state-of-the-art telecommunication technology to meet the growing needs of the Indian telecommunication network. The actual evolution of the industry started after the Government separated the Department of Post and Telegraph in 1985 by setting up the Department of Posts and the Department of Telecommunications (DoT).

The entire evolution of the telecom industry can be classified into three distinct phases.

- Phase I- Pre-Liberalization Era (1980-89)
- Phase II- Post Liberalization Era (1990-99)
- Phase III- Post 2000

Until the late 90s the Government of India held a monopoly on all types of communications – as a result of the Telegraph Act of 1885. As mentioned earlier in the chapter, until the industry was liberalized in the early nineties, it was a heavily government-controlled and small-sized market; Government policies have played a key role in shaping the structure and size of the Telecom industry in India. As a result, the Indian telecom market is one of the most liberalized market in the world with private participation in almost all of its segments. The New Telecom Policy (NTP-99) provided the much needed impetus to the growth of this industry and set the trend for liberalizations in the industry. In the present scenario the public sector is 11.36 percentages and other 88.64 percentage is in the hands of various telecom companies.

### Review of Literature:

The following are the studies have been carried out by the academicians, scholars, practitioners and professionals on the debt management practices.

Athar Iqbal et.al (2012) found positive relation between profitability and leverage which is in consensus with trade off theory. The study suggests that a high profit level leads to rise in higher debt capacity as well as accompanying tax shields. Balakrishnan and Fox (1993) concluded that there is a significant negative correlation

between the development of the specific investments and the level of debt of the companies. Cai and Zhang (2006) divulged that leverage is positively related with size, tangibility and growth whereas it has negative relation with tax rate. Profitability has negative effect on long term leverage and liquidity has negative influence over total leverage. Harris and Raviv (1991) determined that the debt of affirm is positively related to fixed assets, non-debt shields, investments levels, firms size and negatively related to cash flow volatility, growth opportunities, advertising expenditure, bankruptcy and uniqueness of the product. Huang and Song (2006) analyzed that the capital structure determinants for Chinese listed companies and notices that they tend to have much lower long-term debt that in other developing countries. Johnson A (2003) recommended that the firms exchange the cost of underinvestment problems beside the cost of increased liquidity risk when choosing short term debt maturity. Minjina and Mansoor (2008) found that the relationship between market to book ratio and leverage ratio is not monotonic and is being positive for multiples with medium and low values and negative with high values. Ross (1977) argued that the investors understand larger debt levels as a signal of management's confidence in the firm. Vijayalakshmi and Sailaja (2013) concluded that the poor financial health threatens the very survival of the firm and leads to business failures. Also, they suggested that the recent financial crisis and the ensuing economic downturn have had a significant impact on the corporate sector. Williamson (1988) considered the means of financing as structures of governance regulating the relation between the firm and the contributors of financial funds. He also concluded that in the debt contract, which specifies the payments of interest with regular intervals, subjects the firm to constraints of liquidity.

### Need for the Study:

Communication has to keep pace with the advancements in other sectors of country's economy for proper and systematic growth. The telecom services has gained significant attention during the last decades during which many private sector companies like Reliance, Bharthi Airtel, Aircel, Telenor, Idea Cellular, Vodafone, Tata Teleservices have come into picture besides public sector companies like BSNL and MTNL. Except customer addition, there is no corresponding growth in the revenue of the entrepreneurs in this sector. The competition and price war in the part of public sector units and also between private sector counterparts compel them in planning for providing services efficiently at cheaper price to intermediaries and end users. Therefore, the present study is done with the objective of diagnosing the financial health of the select telecom companies in India.

**Objectives of the Study:**

The objectives of the present study are:

1. To examine the overall financial performance of sample companies.
2. To compare financial health of each select company with other companies.
3. To know the debt management practices in Indian telecom sector.

**Methodology:**

Telecom companies are established in two sectors viz., public and private. The study is geographically restricted to India, which covers all the states. Three telecom companies have been selected randomly i.e. BSNL, Bharti Airtel and Reliance and this study covers the period of 5 years from 2010 to 2015.

**(A) Data Collection**

The study is confined to only two companies in the private sector and one company in the public sector. This study is mainly based on secondary data. The required information about these three companies is obtained from published annual reports of corresponding companies.

**(B) Tools For Data Analysis**

The financial health of sample units has been judged through Z-Score Model which incorporates five weighted financial ratios for its formulation.

The Z-Score Model formula used to evaluate the financial health of company as follows:

$$Z = 1.2 A + 1.4 B + 3.3 C + 0.6 D + 0.999 E$$

Where **Z** is the overall index

**A** = Working Capital / Total Assets \* 100

**B** = Retained Earnings / Total Assets \* 100

**C** = EBIT / Total Assets \* 100

**D** = Market Value of Equity / Book Value \* 100

**E** = Sales / Total Assets \* 100

The resulting Z-Score puts a company in one of the three categories:

1. Companies with a Z- Score value is less than 1.8 indicates a high probability for bankruptcy in coming couple of years.
2. Companies with a Z- Score value between 1.8 to 3 are considered within "gray area" i.e. financial viability of the companies is considered to be healthy.
3. Companies with a Z-Score value above 3 are considered very healthy.

**‘A’ Component as a Working Capital / Total Asset:**

A ratio of Working Capital to Total Assets is the ‘A’ component of Z- Score. This is a reasonable predictor of deepening trouble for a company. A company which experiences assets. The WC / TA Ratio, frequently found in studies of corporate problems, is a measures of the net liquid assets of the firm related to the total capitalization. WC is defined as the

difference between current assets and current liabilities. Liquidity and size characteristics are explicitly considered. Ordinarily, a firm experiencing consistent operating losses will have shrinking current assets in relation to total assets.

**Table 1: Statement Showing Working Capital to Total Assets of Select Companies**

Years	BSNL	Bharthi Airtel	Reliance Communications
2010-11	-0.02	-0.03	0.10
2011-12	0.03	-0.06	-0.02
2012-13	0.25	-0.09	0.13
2013-14	0.23	-0.15	0.13
2014-15	0.21	0.27	0.18

**Source:**

www.moneycontrol.com;www.equitymasters.com;www.sansasecurities.com.\

**‘B’ Component as Retained Earnings/Total Assets:**

The ratio of Retained Earnings to Total Assets is ‘B’ component of Z- Score. This provides information on the extent to which a company has been able to reinvest its earnings in itself. This measurement tends to create a positive bias towards older companies, since an older company will have had more time to accumulate earnings. It is the account which reports the total amount of reinvested earnings and/or losses of the firm over its entire life. The account is also referred to as earned surplus. It should be noted that the retained earnings account is subject to manipulations via corporate quasi- recognitions and stock dividend declarations. In addition, the RE/TA ratio measures the leverage of a firm. Those firms with high RE relative to TA have financed their assets through retention of profits and have not utilized as much debt.

**Table 2: Statement Showing Retained Earnings to Total Assets of Select Companies**

Years	BSNL	Bharthi Airtel	Reliance Communications
2010-11	-0.06	0.10	-0.01
2011-12	-0.09	0.07	0.00
2012-13	0.22	0.15	0.05
2013-14	0.17	0.16	0.01
2014-15	0.25	0.17	0.05

**Source:**

www.moneycontrol.com;www.equitymasters.com;www.sansasecurities.com.

**‘C’ Component as a Earning before Interest and Taxes/ Total Assets:**

The ratio of EBIT to Total Assets is called ‘C’ component of Z- Score. This will adjust a company’s earnings for varying income tax factors and makes adjustment for leveraging. These adjustments allow more effective measurement of the company’s

utilization of its assets. This ratio is a measure of the true productivity of the firm's assets, independent of any tax or leverage factors. Since a firm's ultimate existence is based on the earning power of its assets, this ratio appears to be particularly appropriate for studies dealing with corporate failure. Furthermore, insolvency in a bankrupt sense occurs when the total liabilities exceed a fair valuation of the firm's assets with value determined by the earning power the assets.

**Table 3: Statement Showing EBIT Ratios of Select Companies**

Years	BSNL	Bharthi Airtel	Reliance Communications
2010-11	-0.06	0.12	0.03
2011-12	-0.08	0.10	0.13
2012-13	-0.12	0.20	0.24
2013-14	0.11	0.19	0.15
2014-15	0.15	0.11	0.22

Source:

www.moneycontrol.com;www.equitymasters.com;www.sansasecurities.com

#### **'D' Component as a Market Value of the Equity to Book Value of the Total Liability:**

The ratio of Market Value of the Equity to Book value of total liability is called 'D' Component of Z-Score. This gives an indication of how much a company's assets can decline in value before debts may exceed assets. Market Value of Equity refers to the number of outstanding shares multiplied by the market price. Since, BSNL shares are not listed in stock market, the book value of Equity is adopted instead of market value.

**Table 4: Statement Showing Market Value of the Equity to Book Value of the Total Liability of select Companies**

Years	BSNL	Bharthi Airtel	Reliance Communications
2010-11	0.20	4.97	0.53
2011-12	0.12	4.14	0.43
2012-13	0.06	2.77	3.33
2013-14	0.29	4.19	1.04
2014-15	0.04	2.33	0.08

Source: www.moneycontrol.com;

www.equitymasters.com; www.sansasecurities.com

#### **'E' Component as a Sales / Total Assets:**

The ratio of Sales to total assets is 'E' component of Z- Score. It measures the ability of the company's assets to generate sales. This financial ratio is quite important because it is the least significant ratio on an individual basis. In fact, based on the univariate statistical significance test, it would not have appeared

at all. However, because of its unique relationship to the overall discriminating ability of the model.

**TABLE 5: STATEMENT OF SALES TO TOTAL ASSETS OF SELECT COMPANIES**

Years	BSNL	Bharthi Airtel	Reliance Communications
2010-11	0.25	0.53	0.13
2011-12	0.25	0.52	0.13
2012-13	0.22	0.69	0.24
2013-14	0.11	0.66	0.15
2014-15	0.09	0.95	0.22

Source:

www.moneycontrol.com;www.equitymasters.com;www.sansasecurities.com

Elements of ratios for Z- Score values and their trend of three telecom companies of India are presented in the following tables.

**Table 6: Statement Showing the Z-Score of BSNL**

Year	1.2*A	1.4*B	3.3*C	0.6*D	0.999*E	Z-Score
2010-11	-0.024	-1.406	-0.198	0.12	0.249	-1.259
2011-12	0.036	-0.126	-0.264	0.007	0.249	-0.098
2012-13	0.3	0.308	-0.396	0.036	0.219	0.467
2013-14	0.276	0.238	0.363	0.01	0.109	0.996
2014-15	0.252	0.35	0.495	0.024	0.089	1.21

Source: Self Structured

Z- Scores of BSNL from F.Y 2010-11 to 2014-15 are shown in Table 6. It is evident from the table that Z- Scores in all the years are below 1.8. The Z- Scores are varying from minimum of -0.0098 in the year 2011-12 to maximum of 1.21 in the year 2014-15.

It is evident from the above table that the "Financial distress" is very high in BSNL. Unless necessary measures are taken, there is a higher possibility to the company to collapse financially.

**Table 7: Statement Showing the Z-Score of Bharti Airtel**

Year	1.2*A	1.4*B	3.3*C	0.6*D	0.999*E	Z-Score
2010-11	-0.036	0.14	0.396	2.982	0.529	4.011
2011-12	-0.072	0.098	0.33	2.484	0.519	3.359
2012-13	-0.108	0.21	0.66	1.662	0.689	3.113
2013-14	-0.18	0.224	0.62	2.514	0.659	3.837
2014-15	0.324	0.238	0.363	1.398	0.949	3.272

Source: Self Structured

Table 7 discloses the Z-Score values of Airtel from 2010-11 to 2014-15. From the above table it is found that the Z-Scores in the all the years are above 3.0. The Z-Score value of the company ranged from a minimum

of 3.113 in 2012-13 to a maximum of 4.011 in 2010-11. This means that the company has placed itself in healthy zone and its financial position is viable.

**Table 8: Statement Showing the Z-Score of R-Com**

Year	1.2*A	1.4*B	3.3*C	0.6*D	0.999*E	Z-Score
2010-11	0.12	-0.014	0.099	0.318	0.129	0.652
2011-12	0.024	0.000	0.099	0.258	0.129	0.51
2012-13	0.156	0.07	0.33	1.998	0.239	2.793
2013-14	0.156	0.014	0.165	0.624	0.149	1.108
2014-15	0.216	0.07	0.198	0.09	0.219	0.793

**Source:** Self Structured

It is evident from the table 6 that Z-Scores of R-Com are showing a declining trend in the financial years 2010-11 to 2011-12. The values has been increased in FY 2012 and decreased next succeeding years.

The financial position in this situation is uncertain to predict. Therefore, the firm should immediately take all the corrective measures to be in safe zone.

**Table 9: Statement showing Comparative analysis of select Sample Companies in Telecom Sector**

Year	BSNL	Change in Percentage	Bharti Airtel	Change in Percentage	R-Com	Change in Percentage
2010-11	-1.259	-	4.011	-	0.652	-
2011-12	-0.098	-99.22	3.359	-16.25	0.51	78.22
2012-13	0.467	-137.09	3.113	-7.32	2.793	447.65
2013-14	0.996	113.28	3.837	23.26	1.108	-60.33
2014-15	1.21	-17.68	3.272	-14.72	0.793	-28.43

**Source:** Self Structured

It is evident from the table that though the financial position of Airtel is better than the BSNL and R-Com it is highly volatile from year to year, the BSNL is totally distressed position.

### Conclusion:

The financial health plays a significant role in the successful functioning of a firm. Poor financial health threatens the very survival of the firm and leads to business failures. The recent financial crisis and the ensuring economic downturn have a significant impact on the corporate sector. From the results of the study, it is clearly noted that the financial health of select telecom companies in India have been poor. The public sector representative BSNL is still suffering to face the competition from private network operators like Airtel, R-Com etc. It is suggested that all the telecom companies in India should take innovative

steps for the survival and betterment of financial health. Because, there is a new paradigms are taken place in Indian telecom sector. Especially, BSNL should be formulating the new strategies to overcome their distress and improve financial position. Finally, the study discloses that the financial health of the Bharti Airtel is better than the BSNL and R-Com over the period of the study.

### References:

- [1] Info.shine.com/industry/telecom industry in 2016.
- [2] Telecom Regulatory Authority of India
- [3] Athar Iqbal, Irfan Hameed and Naveed Ramzan (2012). The Impact of Debt Capacity on Firm's Growth, American Journal of Scientific Research, Issue 59, ISSN 1450-223X, pp.109-115.
- [4] Balakrishnan S and Fox I (1993). Assets specificity, Firm Heterogeneity and Capital Structure, Strategic Management Journal, Vol. 14, 1993, pp.3-16.
- [5] Cai and Zhang (2006). Capital Structure Dynamics and Stock Returns, The Review of Financial Studies, Vol.15, pp.79-90.
- [6] Harris M and Raviv A (1991). The Theory of Capital Structure, Journal of Finance, Vol. 9, pp. 425-426.
- [7] Hougan R and Song F (2006). The Determinants of Capital Structure: Evidence from China, China Economic Review, Vol. 17, pp.-14-36.
- [8] Johnson A (2003). Debt Maturity and the effect of Growth Opportunities and Liquidity Risk on Leverage, The Review of Financial Studies, Vol.16, pp.209-236.
- [9] Minjina and Mansoor (2008). Capital Structure and Firm Characteristics: Some Evidence from Malaysian Companies, Department of Finance, MPRA.
- [10] Ross S (1977). The Determination of Financial Structure: The Incentive- Signalling Approach, Bell Journal of Economics and Management Science" Vol. 1, No. 8, pp. 23-40.
- [11] Vijayalakshmi and Sailaja (2013). Financial Health of Selected Companies in Telecom Sector: A Comparative Study, Arth Prabhand: A Journal of Economics and Management, Vol.2, Issue 8, pp.53-61.
- [12] Williamson (1988). Corporate Finance and Corporate Governance, The Journal of Finance, Juliet, 1998, pp.567-591.
- [13] Altman (1968). Financial Ratio, Discriminate Analysis and Production of Corporate Bankruptcy, Journal of Finance, Vol. 23 Issue 4 pp.589-609.

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