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TELECOM REGULATORY AUTHORITY OF INDIA

STUDY PAPER ON
SHAREHOLDING PATTERN, FINANCING PATTERN AND CAPITAL STRUCTURE OF INDIAN PRIVATE TELECOM ACCESS SERVICE PROVIDERS

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INTRODUCTION

The growth of the telecom sector in India in the post-liberalization period has been phenomenal. Telecom service providers have adopted a low cost, low tariff business model in the Indian market. Indian consumers have immensely benefited from such low tariffs which are amongst the lowest in the world. Low tariffs have also fuelled the explosive growth in the number of subscribers and revenue earned. The CAGR of subscribers from 2007-08 to 2011-12 was 33.4% while that of gross revenue during the same period was 10.9%.

The major events, regulatory and policy developments in the telecom sector in India since the opening of the sector for private participation are described below:

Year	Significant Events of Indian Telecom Industry
1994-95	(i) Government formulates the National Telecom Policy -1994 (NTP 1994) (ii) Licences granted for cellular services in four metros (two operators per metro circle)
1995-96	Cellular Licences granted for other eighteen circles (two operators per circle). Licences for basic service awarded in six circles
1996-97	Govt. establishes TRAI to regulate the telecom sector and promote competition
1997-98	Third cellular operator (MTNL) introduced in Delhi and Mumbai
1999-00	(i)National Telecom Policy-99 promulgated. (ii) DoT permits migration of licensees from fixed license fees to revenue sharing regime. (iii) Department of Telecom Services corporatized, BSNL formed and introduced as third cellular operator in circles other than Delhi and Mumbai. (iv) TRAI Act amended, TDSAT established.
2000-01	Basic Service Operators (BSOs) permitted to provide mobility services using WLL within short distance charging area (SDCA)
2001-02	(i) Fourth Cellular Operator introduced in all circles. Reliance obtains18 licenses. (ii) International Long Distance (ILD) and National Long distance (NLD) segments opened up for private competition
2002-03	Calling Party Pays (CPP) regime introduced. Incoming calls become free of charge.
2003-04 & 2004-05	(i) Universal Access Service Licences (UASL) introduced. Existing operators allowed to migrate to UASL. BSOs providing mobility within circle using WLL could now provide CDMA based full mobility in the circle. (iii) Most mobile tariffs placed under forbearance by TRAI
2005-06	(i) BSNL introduces one-India plan. Single tariff of Re.1 per minute to anywhere in India (ii) FDI limit in telecom services increased from 49% to 74%
2006-07	(i) 14 Licenses issued to Aircel Group (ii) Govt. allows use of dual technology for existing operators.
2007-08	Issue of UASL licenses to a number of operators. International operators (Sistema of Russia, Bahrain Telecom, Telenor of Norway, Etisalat of the Gulf) take positions in Shyam Telecom, Unitech, Videocon, Loop etc.
2009-10	Tata introduces 'Pay per second plan'.
2010-11	(i) Auction of Spectrum for 3G/BWA. (ii) Mobile Number Portability (MNP) implemented throughout the country.
2011-12	122 licenses cancelled by Supreme Court of India.
2012-13	(i) National Telecom Policy-2012 promulgated. (ii) Auction held for spectrum in 1800 MHz, 900 MHz and 800 MHz bands

The pace at which the telecom sector was growing has seen a downturn from 2011 onwards in terms of reduced profitability and accumulation of debt.

This study paper attempts to provide an overview of the capital structures (deployment of funds in the form of owners' equity and loan fund) of companies operating in the telecom sector based on the annual accounts and other information provided by ***24 Private Telecom Access Service Providers*** **(Annexure A)** for the years 2007-08 to 2011-12. The aim of this study is to provide insights into the financial health of the sector and the impact of intense competition, entry of new players, and auction of 3G and BWA spectrum on indebtedness, declining debt coverage ability and reduced profitability of telecom companies in India.

The material, which relates to major telecom access providing companies, is presented in the following sequence:

(A) SHAREHOLDING PATTERNS

(B) FINANCING PATTERNS

(C) DEBT COVERAGE

(D) INVESTMENT IN FIXED ASSETS

(E) RESERVES & SURPLUS

(F) CAPITAL STRUCTURE & PROFITABILITY OF 5 MAJOR PRIVATE TELECOM ACCESS SERVICE PROVIDERS

(G) CHALLENGES AND STRATEGIES

(A) SHAREHOLDING PATTERNS

A company needs capital for establishment of its business and operations. This capital is obtained either through equity funds / share capital (i.e. owners' funds) or through debt (loan fund).

The share capital of the company is divided into shares which refer to the portion of a company's equity that has been subscribed to by the shareholders for cash or equivalent items of capital value. A company can raise capital by issue of share capital which is contributed by its members. The Memorandum of Association of the company states the amount of capital with which the company is registered and the number of shares into which the share capital of the company is divided. Share capital is the total amount of capital collected from its shareholders for achieving the common goal of the company as stated in its Memorandum of Association. Equity funds are contributed by its members who are issued shares in the company for the sum contributed by them in the total share capital of the company and they have ownership right in the company.

There are two broad categories of shares which are issued to shareholders (i) equity shares and (ii) preference shares.

(i) Equity Shares

Equity shares carry ownership and voting rights. Equity shareholders share profit in the form of dividend, which varies with the availability of profits. In the event of winding up of the company, the payment of equity shares is made by the company after repayment of all debts and other liabilities including payment to preference shareholders.

(ii) Preference Shares

Preference shares are securities issued by a company that do not carry voting rights like ordinary shares. Preference shares are offered as part of share capital. However, preference shares are quasi-debt and combine features of equity and debt. They carry equity risk as the principal is not secured; however, they entitle holders to a dividend similar to fixed deposit interest and they have a set tenure at the end of which the company redeems the principal. If the company is wound up, holders of preference shares get priority over owners of ordinary shares. Companies pay dividend on preference shares only when they earn a profit. In the case of cumulative preference shares, if the company does not pay dividend in one year, the holder has the right to the payment in the next year.

Because dividend income is tax-free in the hands of investors (though companies pay dividend distribution tax) whereas interest income from non-convertible debentures (NCDs) is taxed, earnings from preference shares are higher than earnings from NCDs and tax-free bonds. However, the rating of preference shares is also important. While investing in preference shares, investors look to balance advantages from tax arbitrage with the risk involved.

The amounts of equity & preference share capital in the telecom companies covered in the study were Rs. 18787 crore and Rs. 1114 crore in 2007-08 which went up to Rs. 24182 crore and Rs. 10370 crore respectively in 2011-12. It is evident from the table below that new infusion of funds in the sector is mainly in the form of preference share capital:

Table 1

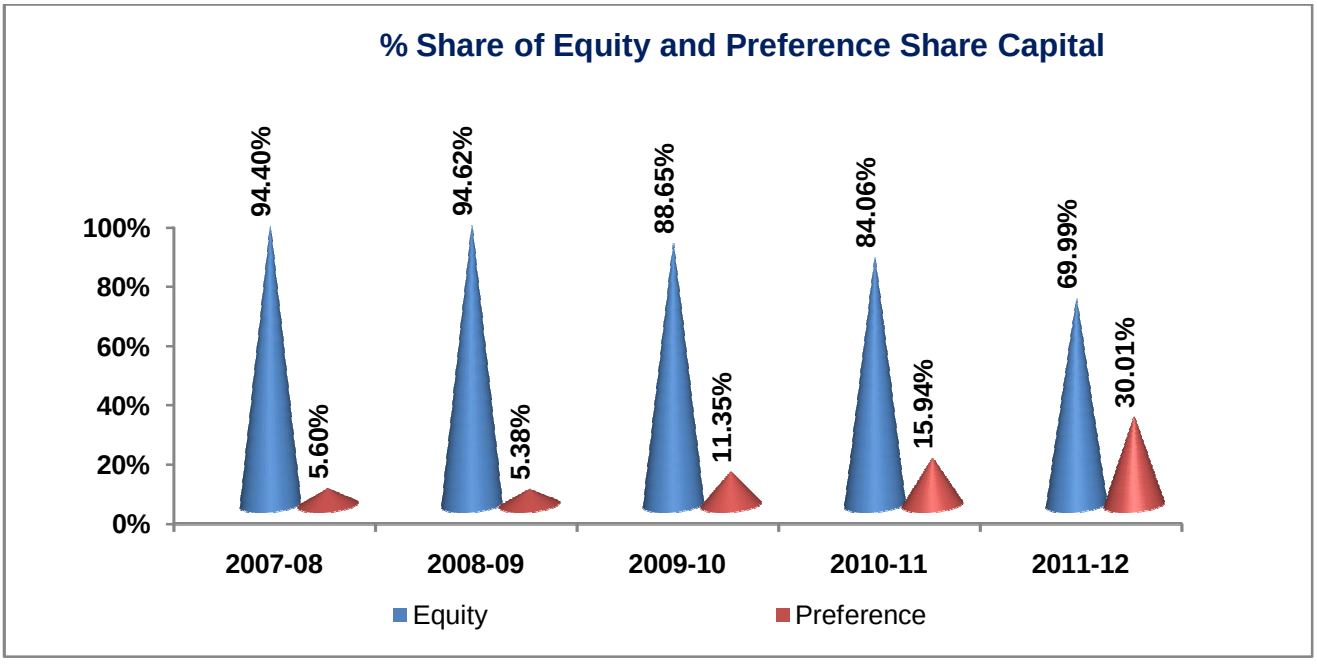
Break-up of Equity and Preference Share Capital

(Rs. in crore)

Share Capital	2007-08	2008-09	2009-10	2010-11	2011-12
Equity	18787.17	19481.41	20457.22	23110.51	24182.30
Preference	1113.91	1107.36	2618.38	4382.52	10370.02

The % shares of equity and preference share capital were 94.40% and 5.60% respectively in 2007-08, which changed to 69.99% and 30.01% respectively in 2011-12. The transition is evident from the chart below:

Chart 1



From the point of view of ownership, the shareholders' contribution in the equity and preference share capital is categorized as under:

1) Indian Promoters,

2) Foreign Promoters and;

3) Others (includes Indian Institutions, Foreign Institutions, Indian Corporates, Foreign Corporates and the Public)

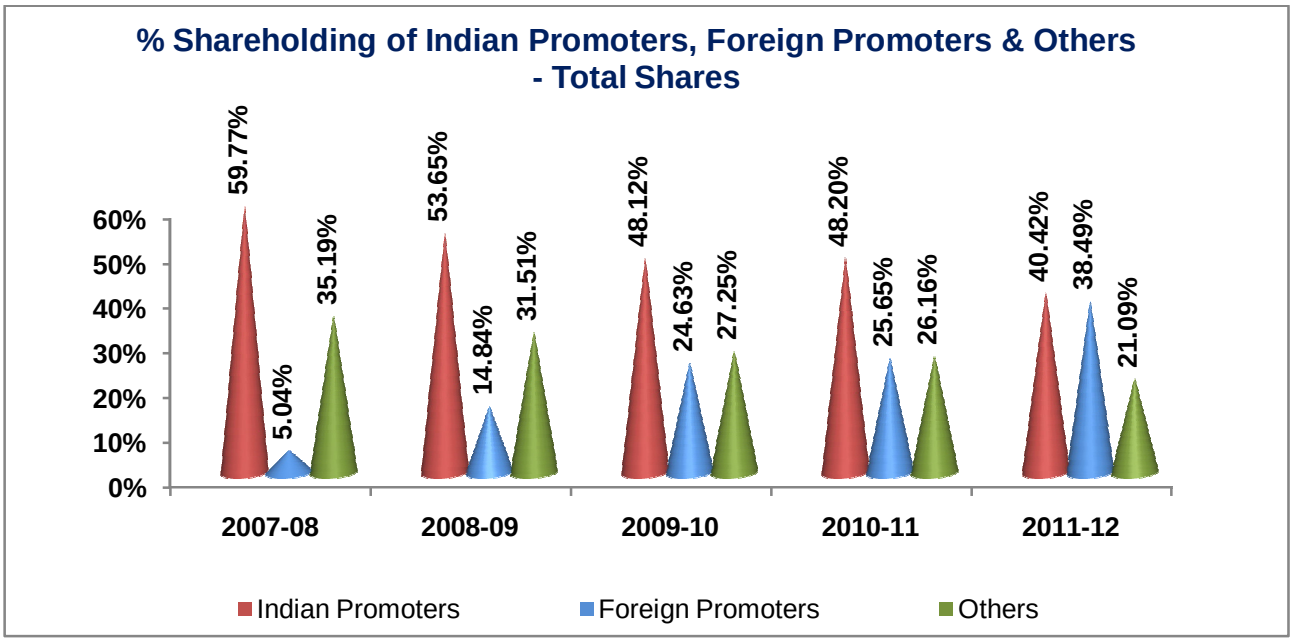
(1) INDIAN PROMOTERS, FOREIGN PROMOTERS & OTHERS – TOTAL SHAREHOLDING

The share of the Indian promoters in the total shareholding of major telecom access providing companies was 59.77% in the year 2007-08, which has declined to 40.42% in 2011-12. Foreign promoters have increased their stake or purchased the stake of Indian promoters in telecom companies such as Aircel, Unitech, Sistema Shyam, Bharti Airtel, Vodafone etc. The analysis of the total shareholding for the period 2007-08 to 2011-12 in private telecom access service companies is presented below:

Table 2

Indian Promoters, Foreign Promoters &Others - Total Shareholding (Rs. in Crore)					
Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Indian Promoters	11895.04	11046.71	11104.04	13250.37	13966.04
Foreign Promoters	1002.31	3055.06	5682.81	7051.12	13299.48
Others*	7003.73	6486.99	6288.74	7191.55	7286.80
*Others include Indian Institutions, Foreign Institutions, Indian Corporates, Foreign Corporates and Public					

Chart 2



(2) INDIAN PROMOTERS, FOREIGN PROMOTERS& OTHERS – EQUITY SHAREHOLDING

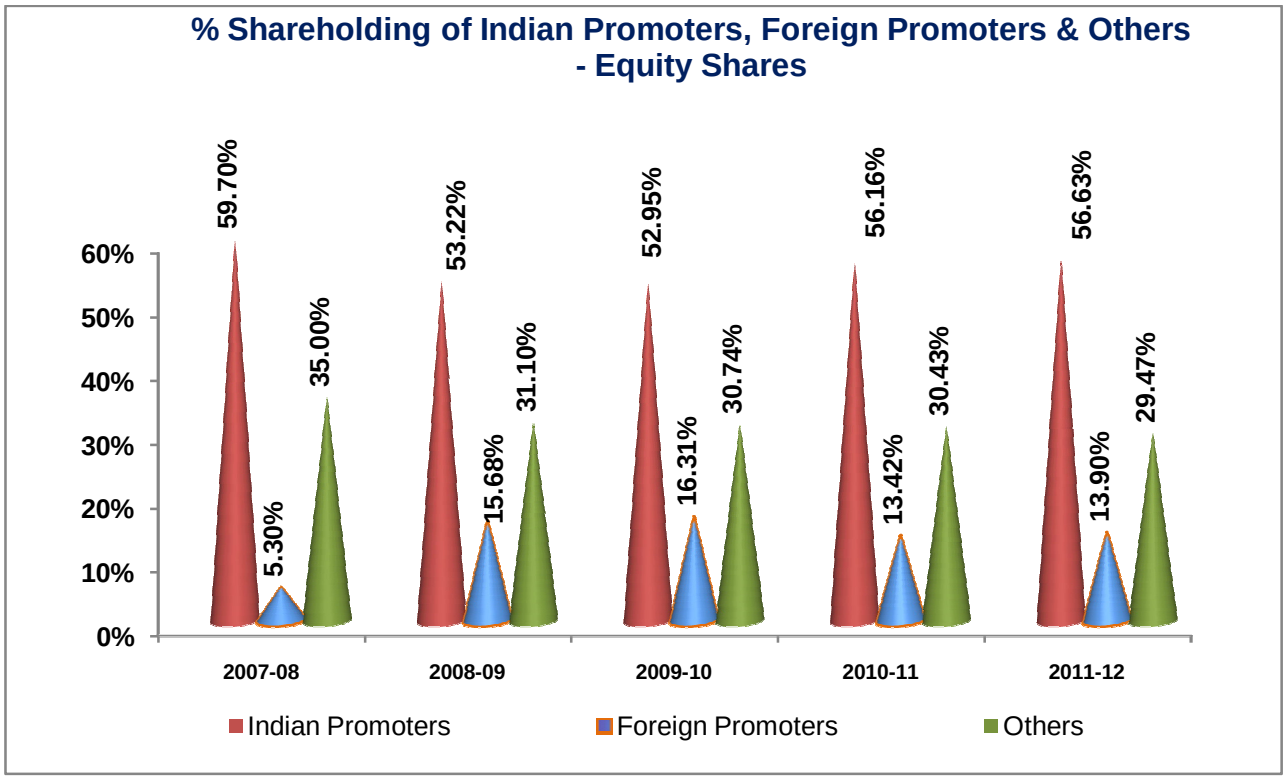
The share of the Indian promoters in the equity shareholding declined from 59.70% in the year 2007-08 to 56.63% in 2011-12. Unitech, Tata and Vodafone are among the telecom companies whose Indian promoters' equity shareholding has declined.

The share of the foreign promoters in the equity shareholding has increased from 5.30% in the year 2007-08 to 13.90% in 2011-12. In Bharti, Unitech, Tata, Sistema Shyam, Loop and Vodafone, the stake of foreign promoters in equity shareholding has increased. The change in the share stake of Indian promoters, foreign promoters &others is evident from the following table & chart:

Table 3

Indian Promoters, Foreign Promoters &Others - Equity Shareholding (Rs. in Crore)					
Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Indian Promoters	11216.81	10368.48	10832.04	12978.37	13694.04
Foreign Promoters	995.76	3055.06	3336.44	3100.44	3361.30
Others	6574.61	6057.87	6288.74	7031.70	7126.96

Chart 3



(3) INDIAN PROMOTERS, FOREIGN PROMOTERS&OTHERS –PREFERENCE SHAREHOLDING

The trend indicates that the preference shareholding of Indian promoters and others have declined from 60.89% in the year 2007-08 to 2.62% in 2011-12. The decline in preference shareholdings by Indian promoters is mainly in Tata.

The share of the foreign promoters in the total preference shareholding has gone up sharply from 0.59% in the year 2007-08 to 95.84% in 2011-12. The increase in foreign promoter's shareholding in the preference share capital is Rs. 5988 crore and is mainly in Aircel group. The change in the stake of share of Indian promoters, foreign promoters & others in the preference shareholding is evident from the following table & chart:

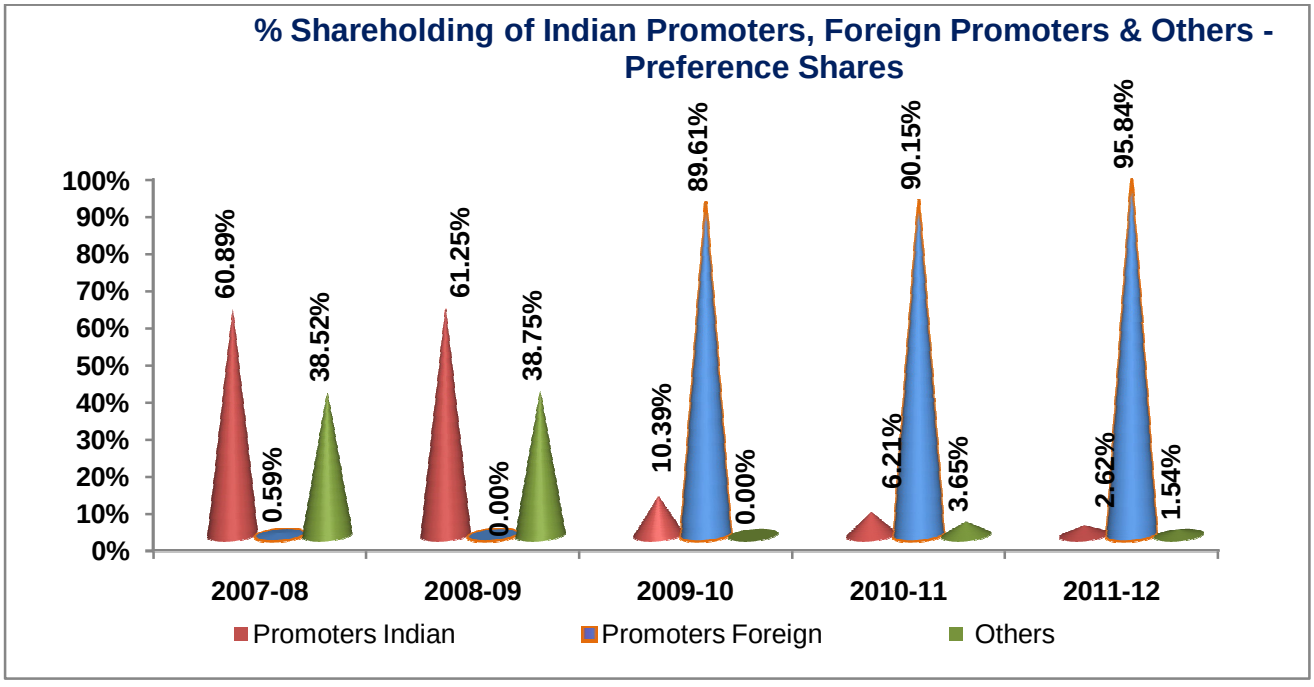
Table 4

Indian Promoters, Foreign Promoters & Others - Preference Shareholding

(Rs. in Crore)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Promoters Indian	678.23	678.23	272.00	272.00	272.00
Promoters Foreign	**6.55**	0.00	2346.38	3950.67	**9938.18**
Others	429.12	429.12	0.00	159.85	159.85

Chart 4



(4) OTHERS' SHAREHOLDINGS- EQUITY SHARES

The shareholding of Indian institutions in equity shareholding in the telecom sector has gone up from Rs. 376 crore in 2007-08 to Rs. 646 crore in 2011-12, whereas the shareholding of foreign corporates in equity shareholding has gone up from Rs.19 crore in 2007-08 to Rs.1252 crore in 2011-12. The break-up of equity shareholding in the others category is as follows:

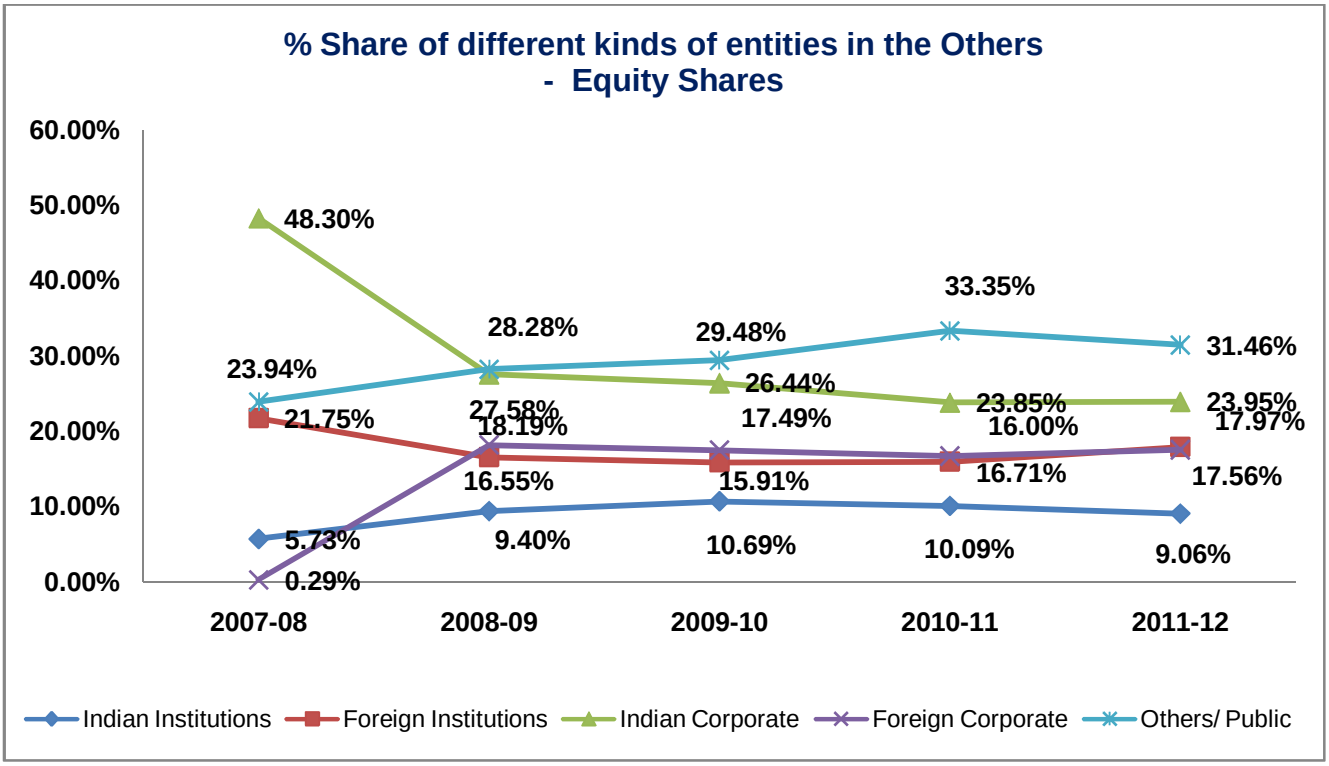
Table 5

Break up of shareholdings of Others - Equity Shares

(Rs. in Crore)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12
Indian Institutions	376.48	569.55	672.33	709.28	645.82
Foreign Institutions	1429.90	1002.61	1000.62	1125.13	1280.39
Indian Corporate	3175.28	1670.62	1662.52	1677.13	1707.16
Foreign Corporate	19.31	1101.84	1099.60	1175.17	1251.52
Others/ Public	1573.65	1713.25	1853.67	2345.00	2242.07
Total	6574.61	6057.87	6288.74	7031.70	7126.96

Chart 5



(B) FINANCING PATTERNS

Need for Debt

At a time when the sector is not performing well due to low profitability, sluggish growth and uncertain policy environment, infusion of funds is most required to ensure regular cash flows for operations, expansion of network, introduction of new technologies and services and acquisition and retention of customers.

Initial investments in telecom have long gestation periods. When a telecom business is started, funds are blocked for a long duration without significant returns being earned on such funds. In the early stages, therefore, equity could be a better option for financing the business entity in the telecom sector. On the other hand, funding through debt has some strategic advantages over funding by equity. To meet the requirement for additional funds for expansion, companies generally rely on long term loans / debts rather than own funds / equity.

Strategic Advantages of Funding through Debt over Equity[1]

Debt funding can be in the form of short-term loans or long-term loans. The lender is paid interest on the debt / loan funds as an opportunity cost. When the cost of debt procurement is less than the average rate of return (IRR) of the company, it is beneficial to have funds in the form of debt. When the share of debt in the capital structure of the company goes up, the Weighted Average Cost of Capital (WACC) of the company declines.

When a company procures additional debt in the form of loans, bonds or preferred stock for acquisition of assets on which it expects to earn a return higher than the interest cost payable on such debt, its shareholders earn a higher return on their capital. If on the other hand, the company earns lesser return on such acquired assets than the cost of procurement of debt, shareholders get a lesser return or no return.

Funding though debt is also advantageous because interest charges paid for debts service are deductible expenses to determine taxable profits. Therefore tax benefit on payment of interest on debts is an incentive for procuring funds through debt e.g. if interest charges are 8.50% and the corporate tax rate is 33.99%, the effective interest rate will be5.61% i.e. {8.5% *(1-33.99%)}.

However, when the indebtness of the company increases, the credit rating of such company in the financial market could be downgraded. The cost of debt (interest charges) will go up for such a company along with the increase in risk.

SOURCES OF DEBT

The sources of debt financing for a company are short- term loans and long- term loans. Debt funding can be done through:

1. Loans from the banks and financial institutions in India,
2. Loans from the foreign banks and foreign financial institutions,
3. Inter-corporate loans and;
4. Loans in the form of vendor credits

[1] Equity refers to sum of Equity share capital, Preference share capital and Reserves & Surplus

The debt position of the 24 private telecom access service providers for the years 2007-08 to 2011-12 is as under:

Table 6

Debt in the Telecom Sector

(Rs. in crore)

	2007-08	2008-09	2009-10	2010-11	2011-12
Long Term Loan	38698.08	63975.86	62152.38	83727.95	116859.82
Short Term Loan	32649.59	44820.18	47253.96	80065.44	53406.52
Total Loans	**71347.67**	**108796.04**	**109406.34**	**163793.39**	**170266.34**
% Share in Total Loan					
Long Term Loan	54.24%	58.80%	56.81%	51.12%	68.63%
Short Term Loan	45.76%	41.20%	43.19%	48.88%	31.37%
Foreign currency Loans/Bonds	13928.70	19705.68	20135.78	23216.63	40045.28
% Share of Foreign currency Loans/Bonds in Total Loan	19.52%	18.11%	18.40%	14.17%	23.52%
Fixed Assets (Gross block)	**118111.83**	**161557.09**	**202518.84**	**258705.08**	**305285.71**

- Long-term loans have increased from Rs. 38698 crore in 2007-08 to Rs. 116860 crore in 2011-12, an overall CAGR of 31.82% over the last five years. This is primarily due to the need of long-term funds requirement for investment in 3G/BWA spectrum and for expansion of networks.

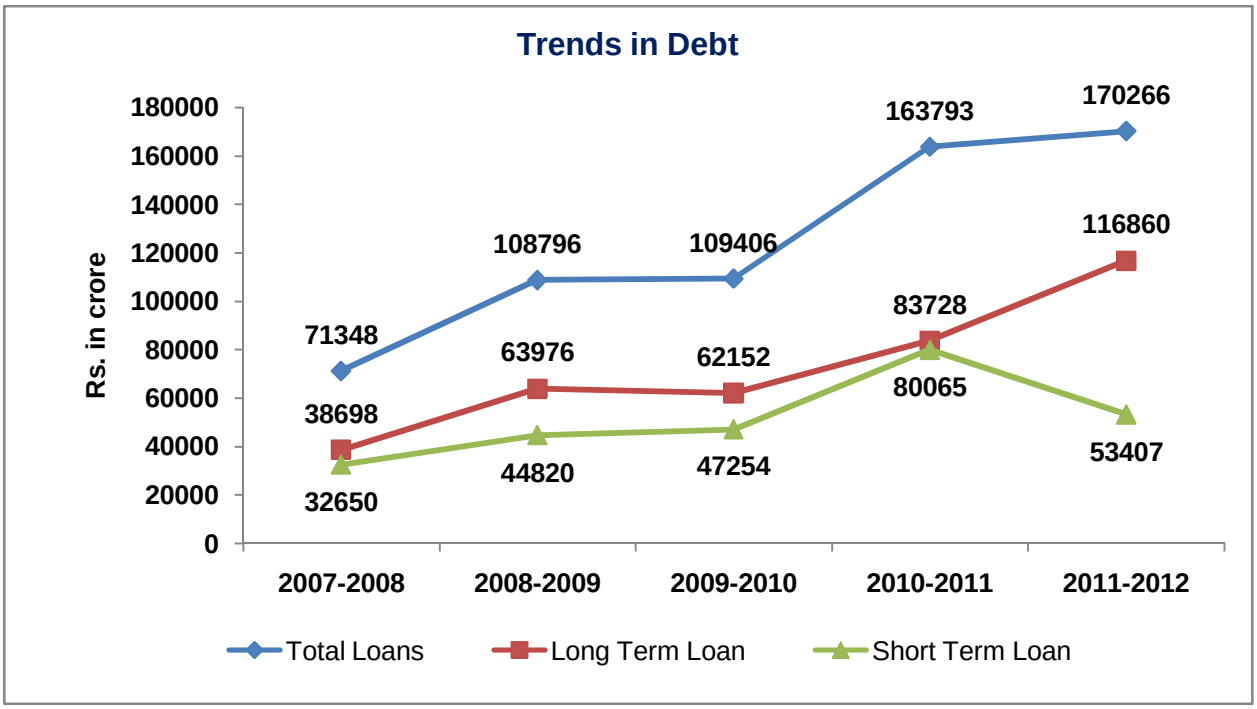
- Short-term loans have increased from Rs. 32650 crore in 2007-08 to Rs. 53407 crore in 2011-12, an overall CAGR of 13.09% over the last five years.

- The share of long-term loans in total loans has increased from 54.24% in 2007-08 to 68.63% in 2011-12, with corresponding decline in the share of short-term loans.

- There was a sharp decline in Short-Term Loans and increase in Long-Term Loans in 2011-12. To meet the immediate requirement of funds for spectrum purchases in the 2010 3G and BWA auctions, short term loans had been taken by a number of companies. In 2011-12, these short-term loans were repaid or replaced with long-term loans.

The following chart depicts the trends of Debt - Total, Long-Term and Short-Term-of 24 private sector telecom access service providers for the years 2007-08 to 2011-12:

Chart 6



Foreign Currency Loans

The quantum of foreign currency loan has gone up from Rs. 13929 crore in 2007-08 to Rs.40045 crore in 2011-12 as evident from Table 6. The increase in foreign currency loans in 2008-09 over the previous year is mainly due to borrowings by Reliance Communications and Idea Cellular. Reliance, Tata, Bharti Airtel and Idea have the major share (88%) in foreign currency loans/ bonds outstanding at the end of year 2011-12.

Impact of Exchange Fluctuation on Foreign Currency Loans

A peril of borrowing in foreign currency is that the borrowers have to bear an additional burden of interest payment and loan repayment in the case the exchange rate falls. There is also a capital risk associated with a fall in the exchange rate. Foreign exchange fluctuations can affect profitability by increasing the financial burden of the company. However, hedging is a risk management strategy that is used to limit or offset the probability of loss due to fluctuations in exchange rates for currencies.

As per information obtained from the telecom companies, in the Indian telecom sector, the impact of declining rupee value has been mitigated by the major service providers through hedging of foreign currency loans. Hedging actions taken in respect of foreign exchange loans by some TSPs are described below:

- Idea Cellular- fluctuations in exchange rate are being taken care of through complete hedging of loans payable within 4 years and partial hedging of loans payable beyond 4 years.

- Reliance- no hedging is being done as the company receives foreign income from its global operations which compensates for the fluctuations in the exchange rate of the Rupee.

- Bharti Airtel- partial hedging has been done only for loans which are payable in the next year, since the cost of hedging is quite high.

- Tata- has also hedged its foreign currency loans. However, the average hedging cost of 6-7% on foreign currency loans has increased the borrowing cost.

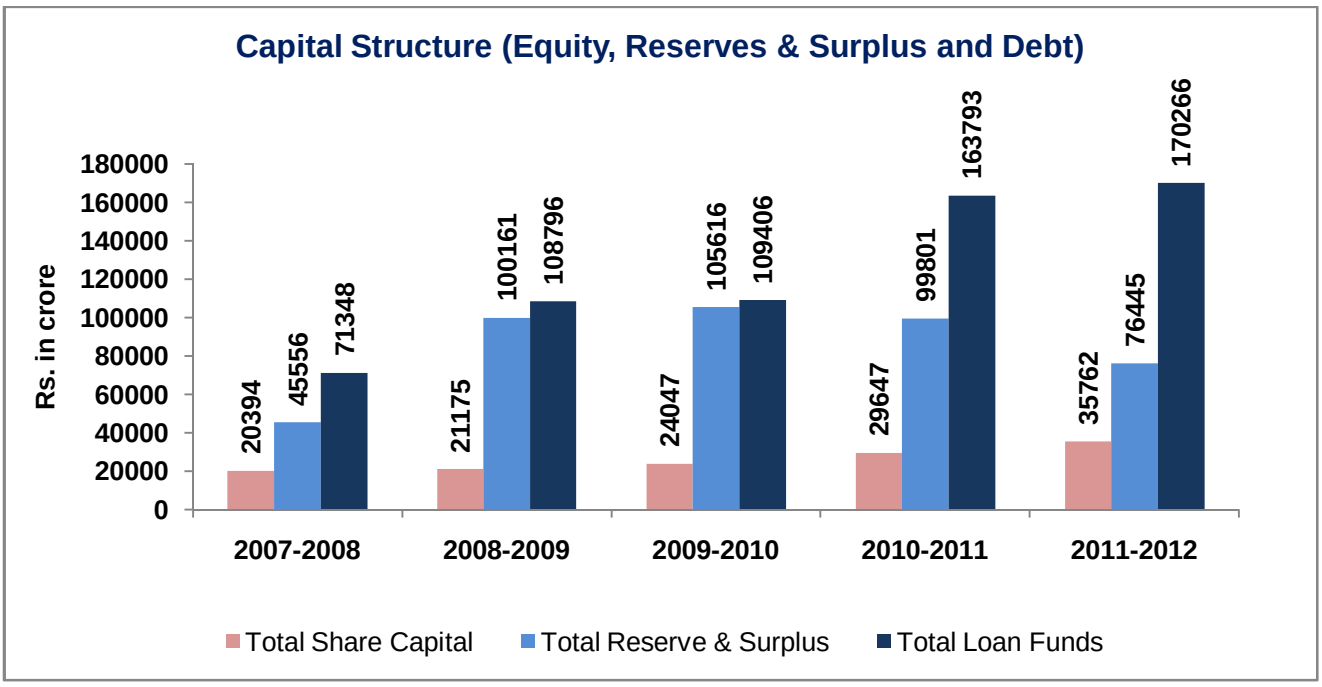
Capital Structure

Capital structure represents the total long term investment in a business entity. It includes funds raised through equity and preference shares, bonds, debentures, term loans from financial institutions etc. Thus, capital structure is the mixture of different sources of funds that the company uses. The decision regarding type of capital structure of a company is of critical importance because of its potential impact on profitability and solvency. An ideal capital structure (combination of debt and equity) of a company is that which maximizes the shareholder's wealth and promotes the business growth of the entity.

The capital structure of a company needs to be determined within the debt capacity of the company i.e. its ability to generate income to have enough cash to pay the creditors towards fixed charges (interest) and principal. The use of excessive debt can threaten the solvency of the company. If the company opts for more debt, that may trigger off a high interest burden, devour profits, depress earnings per share and endanger the very survival of the company. On the other hand, a conservative policy may deprive the company of the advantage of magnifying the rate of return to its equity owners as a higher equity component results in low earnings per share.

The following chart presents the capital structure (equity, reserves & surplus and debt) of the 24 private sector telecom access providers over the last five years:

Chart 7



DEBT-EQUITY RATIO:

The relationship between borrowed funds and owner's capital (equity) is a commonly used measure of the long-term financial solvency of a company. This relationship is depicted by the debt-equity ratio. This ratio measures the relative claims of outsiders and owners against the company's assets. It indicates the relationship between the external equities (or) outsider's funds and the internal equities (or) the shareholders funds. Lower values of debt-to-equity ratio are favorable indicating less risk. Higher debt-to-equity ratio is unfavorable because it means that the business relies more on external borrowings and thus it is at higher risk, especially at higher interest rates. The debt-equity ratio of the 24 private telecom access service companies during the last five years are given below:

TOTAL DEBT-EQUITY RATIO:

Table 7

Total Debt-Equity Ratio (in times)				
2007-08	2008-09	2009-10	2010-11	2011-12
1.08	0.90	0.84	1.27	1.52
Total Debt-Equity Ratio = Total Debt/Shareholder's funds (Share capital +Reserves & Surplus)				

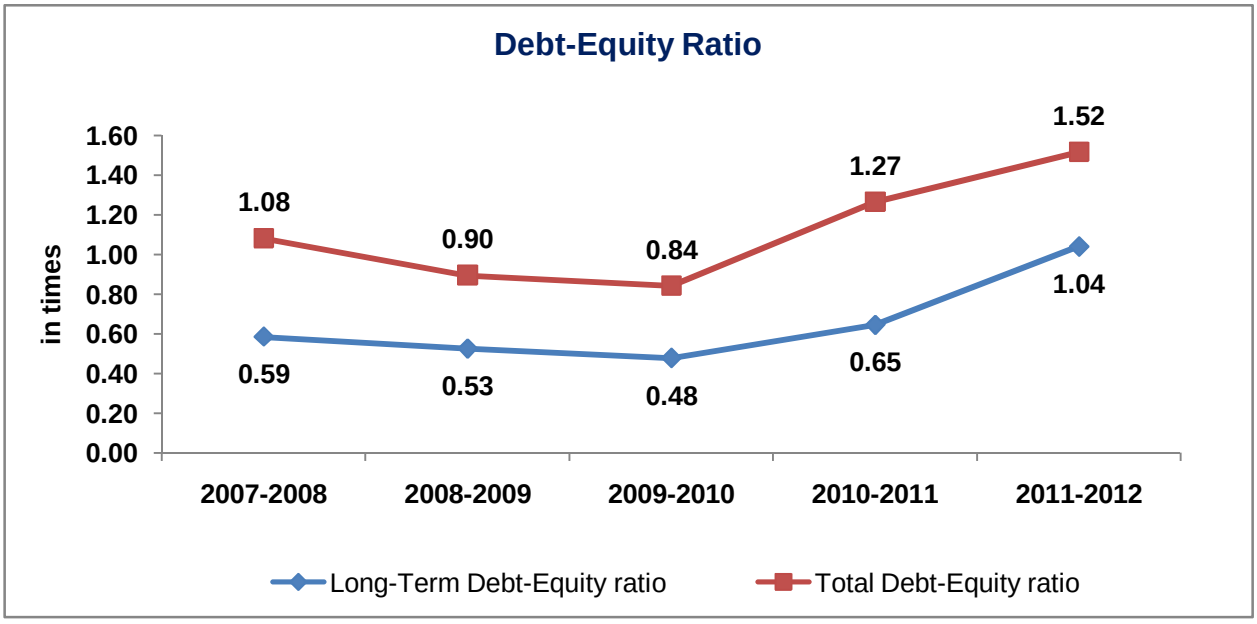
LONG-TERM DEBT-EQUITY RATIO:

Table 8

Long-Term Debt-Equity Ratio (in times)				
2007-08	2008-09	2009-10	2010-11	2011-12
0.59	0.53	0.48	0.65	1.04
Long-Term Debt-Equity Ratio = Long Term Debt/Shareholder's Funds (Share Capital +Reserves & Surplus)				

The trend of debt-equity ratio for these companies is illustrated in the chart below:

Chart 8



Reasons for spurt in Debt –entry of new operators, acquisition of 3G and BWA Spectrum by Access Providers

The increase in the Debt-Equity ratio is mainly due to increase in the borrowings by the sector on account of entry of new operators in the access service segment after issue of new licences in 2008-09 and auction money paid for 3G and BWA spectrum in 2010-11.

Auction money of Rs. 87320 crore has been paid by telecom access service providers for acquiring 3G/ BWA spectrum. The precise funding pattern for this amount is not available in the public domain; it may however be presumed that a portion of this amount at least has been raised in the form of debt. If the entire amount had been raised by debt, it would form 51% of total debt of telecom access provider companies (2011-12); if 50% of the amount had been raised through debt, it would form 26% of the total debt of these companies (2011-12). This affords an insight into the kind of impact that the financing of the auction may have had on capital structures.

Debt has also gone up due to financing requirements for roll-out of 3G services in the country and expansion of networks to cater the growing demand of telecommunication service in semi urban, rural and remote areas.

The following observations regarding debt in the telecom sector are relevant:

- Debt is the main source of funding for new telecom operators like Uninor, Aircel and Sistema Shyam.
- Due to uncertainty in the sector, the promoters rely more on debt funding than on funding through equity.

- Debt funding is easier because of inter-corporate loans and access to financial institutions, both domestic and foreign.

- Vendor- credit (usually for a period of 90 days) is usually offered as interim financing till the telecom companies obtain regular loans.

Some companies are using additional debt for debt retirement. Some major access service providers such as Airtel, Reliance and Aircel have resorted to the following methods of reducing interest cost burden and improving profitability:

- Reliance Communication (RCom) has entered into an agreement to lease its network and optical fibre network for carriage services to Reliance Jio (a new BWA licensee) for Rs. 12000 crore to be paid over the agreement period. (Rs. 800 crore shall be payable annually by Reliance Jio to RCom). A commercial agreement has also been signed between Reliance Industries Limited (RIL) and RCom by which the former will use the latter's fibre optic network for a one-time payment of Rs 1200 crore.

- The promoters of Aircel (Maxis Communications) have recently infused equity of over Rs. 5000 crore to ease the debt position and reduce the cost of debt.

- Bharti Airtel has recently sold 5% stake to Doha-based Qatar Foundation Endowment for $1.26 billion (Rs 6796 crore) to strengthen its capital structure and fund its growth plans.

DEBT EQUITY RATIO – SECTORAL COMPARISON

Efficient and adequate infrastructure is a pre-requisite for economic growth. According to noted economist Dr. V.K.R.V. Rao, "The link between infrastructure and economic development is not a once and for all affair. It is a continuous process; and progress in development has to be preceded, accompanied, and followed by progress in infrastructure, if we are to fulfill our declared objectives of generating a self-accelerating process of economic development."[2]

In recent years, India is consistently increasing infrastructure spending. Currently India's infrastructure spending is 8% of GDP. The Indian Government is also offering various incentives such as liberalization of FDI norms and grant of tax holidays to mobilize resources from domestic as well as foreign sources.

The following table provides a comparison of the capital (debt-equity) structure of the various industries in the infrastructure sector. The debt-equity ratio of eleven different Indian industries over the past 5 years is shown in the table below:

[2] *Dr.V.K.R.V. Rao, (http://www.pwc.com/gx/en/engineering-construction/pdf/infrastructure-in-india.pdf)*

Table 9

Debt-Equity ratio in the Infrastructure sector[3] (in times)					
Infrastructure sectors	2007-08	2008-09	2009-10	2010-11	2011-12
Telecommunication Services (Only access service providers)	1.08	0.90	0.84	1.27	1.52
Railway Transport & Allied Services	3.57	2.82	2.43	2.16	1.96
Road Transport Infrastructure Services	4.78	4.09	3.39	3.68	3.31
Shipping Transport & Allied Services Industry	1.01	0.81	0.90	0.94	1.02
Electricity Generation Sector	0.86	0.99	1.02	1.14	1.17
Electricity Distribution Industry	1.94	2.19	2.40	2.26	2.29
Coal & Lignite Industry	0.42	0.58	0.43	0.57	0.36
Crude Oil & Natural Gas Sector	0.14	0.22	0.19	0.18	0.17
Minerals Industry	0.19	0.18	0.20	0.14	0.16
Infrastructural Construction Sector	1.23	1.25	1.30	1.30	1.52
Cement Industry	0.76	0.69	0.75	0.67	0.60
Simple Mean	1.45	1.34	1.26	1.30	1.28
Median	1.01	0.90	0.90	1.14	1.17

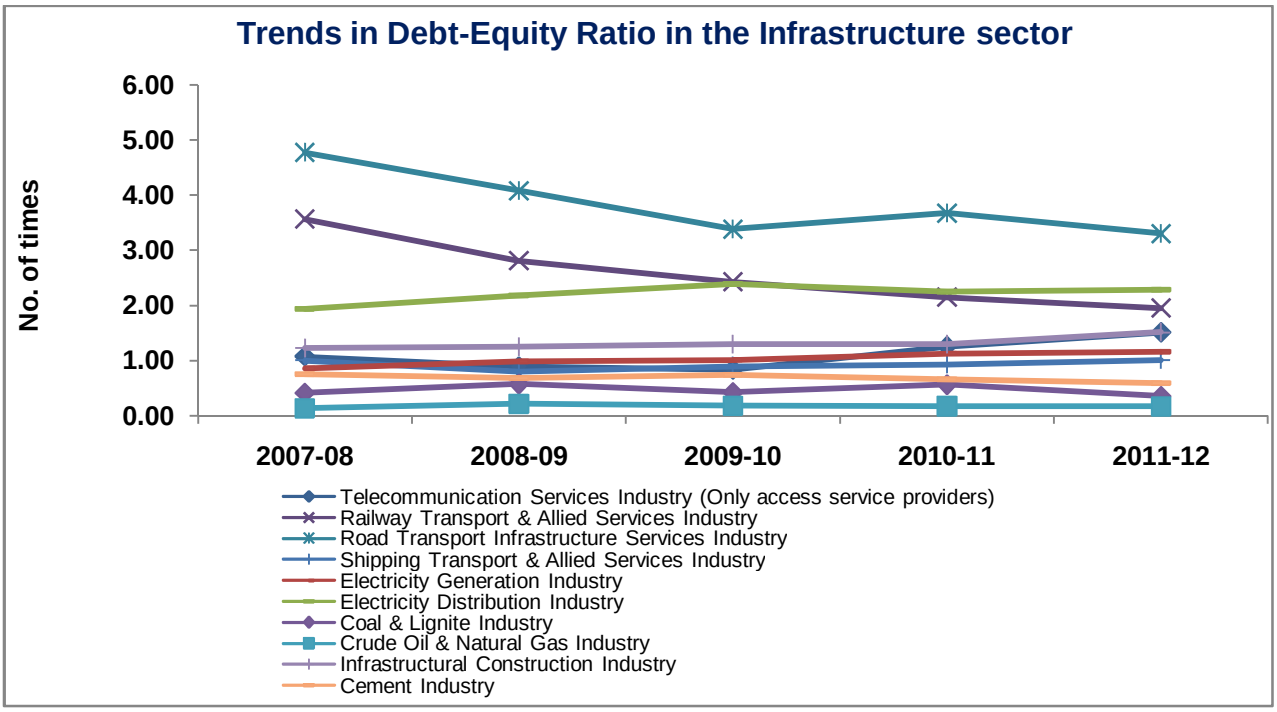
Telecom service sector (Only access service providers) had a debt equity ratio of 1.52 in 2011-12, which is the highest debt-equity ratio it has recorded in 5 years. It is also higher than the mean and median values for the infrastructure sector in 2011-12.

Railway Transport & Allied Services has shown a continuous decrease in the debt-equity ratio over the last five years. However, Electricity Generation and Infrastructural Construction have exhibited a constant increase in debt-equity ratio over the same period, though the increase is small. Over the last five years, the debt-equity ratio of Coal & Lignite, Crude Oil & Natural Gas, Minerals and Cement have been consistently less than one.

[3] *Source: (http:// industryoutlook.cmie.com)*

The chart below depicts the five year trend of debt equity ratio of various infrastructure and other industries.

Chart 9



DEBT EQUITY RATIO OF SOME FOREIGN TELECOM COMPANIES

The debt-equity ratio of some foreign telecom companies[4]are tabulated / illustrated below:

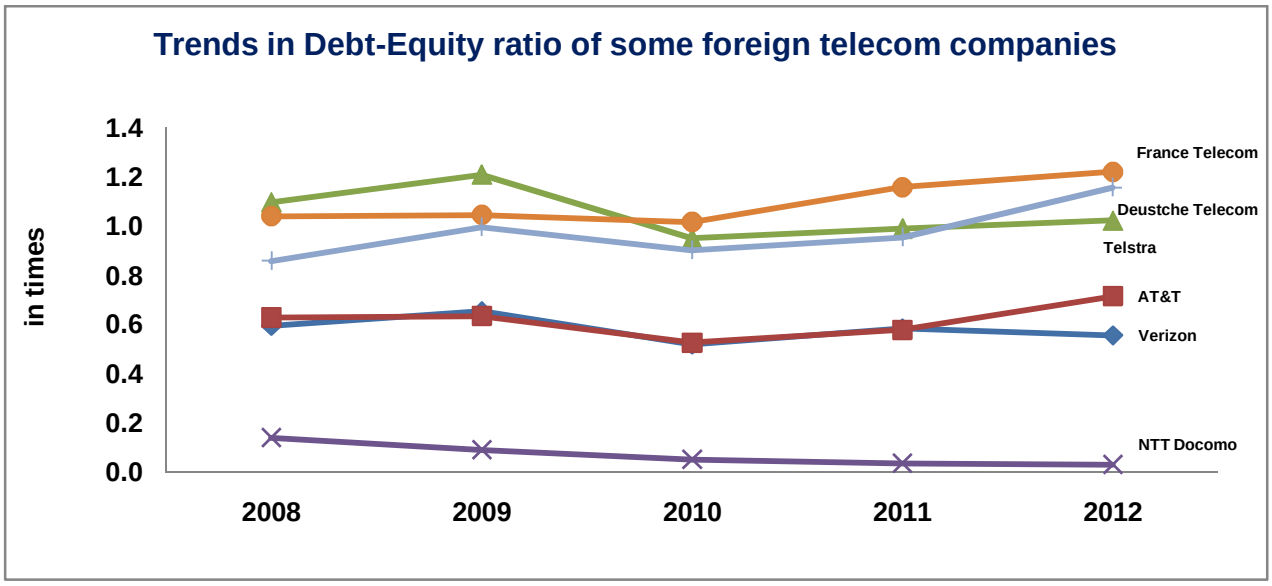
Table 10

Debt Equity Ratio of some Foreign Telecom Companies (in times)					
Name of company	2008	2009	2010	2011	2012
Verizon	0.60	0.65	0.52	0.59	0.56
AT&T	0.63	0.63	0.53	0.58	0.72
Telstra	1.10	1.21	0.95	0.99	1.02
NTT Docomo	0.14	0.09	0.05	0.04	0.03
BT Group plc	73.17	N.A.	4.80	5.81	N.A.
France Telecom	1.04	1.05	1.02	1.16	1.22
Deustche Telecom	0.86	1.00	0.90	0.95	1.16
Source of Annual reports: New York Stock Exchange and Companies websites					

[4] *Source of Annual Reports: New York Stock Exchange, Companies Web Site.*

British Telecom's Debt -Equity ratio has not been depicted in the chart as the same was very high at 73.17 times in 2008 and to depict the same in the graph was difficult in view of other companies

Chart 10



The debt-equity ratio of some foreign telecom companies such as AT&T, Telstra, BT Group plc, France Telecom and Deustche Telecom have been continuously rising since 2010. NTT Docomo is the only company whose debt-equity ratio is falling continuously thereby pointing towards increasing capital inflows through equity.

The increase in the quantum of borrowings by the Indian telecom sector in recent times has also impacted the capital gearing ratio.

CAPITAL GEARING RATIO:

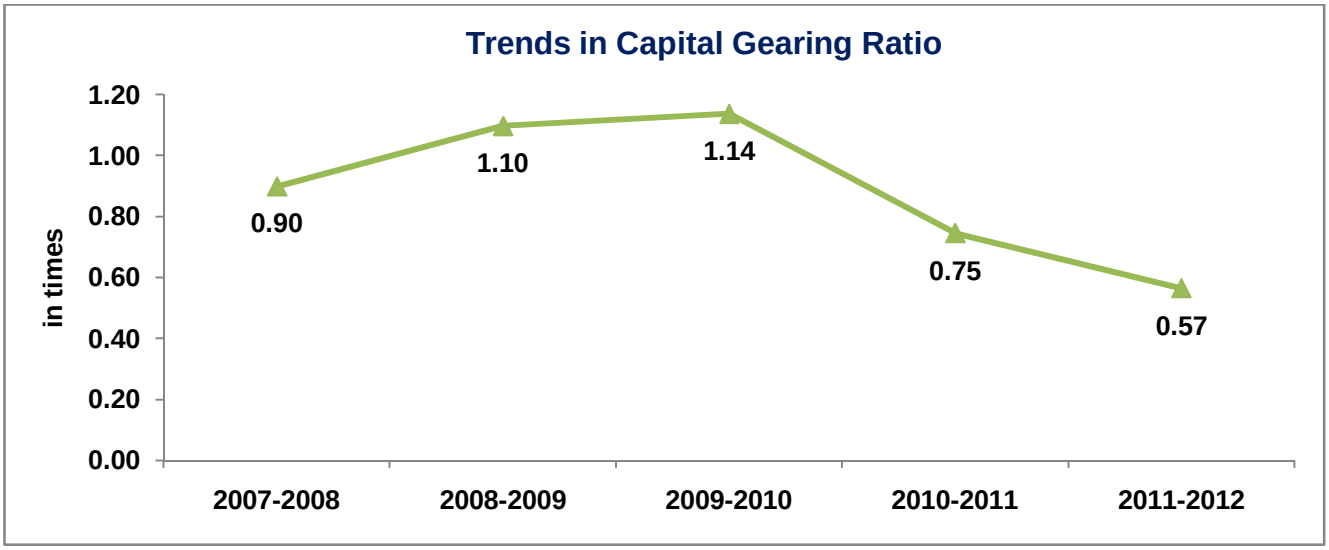
The term capital gearing is used to describe the relationship between equity share capital including reserves and surplus to fixed interest/dividend bearing securities. If fixed interest bearing loans exceed the equity share capital including reserves, the firm is said to be highly geared and vice versa. The capital gearing ratio of telecom service sector (access services) during the last five years is given in the table below:

Table 11

Capital Gearing Ratio (in times)				
2007-08	2008-09	2009-10	2010-11	2011-12
0.90	1.10	1.14	0.75	0.57
Capital gearing ratio**:** Equity share capital plus reserves& surplus/loan funds plus preference capital				

From the above table, it appears that the sector is highly geared viz. it is more inclined towards fixed interest bearing securities.

Chart 11



(C) DEBT COVERAGE

A company may raise debt from various sources. The debt may be in the form of debentures or loans borrowed from financial or public institutions or banks for a certain period of time at a specific rate of interest. Debt coverage demonstrates the capacity of the company to repay the principal as well as to pay interest charges on the debt.

The debt coverage ratio also known as “debt service coverage ratio" is the ratio of cash available for debt servicing in the form of interest, principal and lease payments. This ratio is used to measure the ability of a company to produce enough cash to pay its interest and principal (including lease) payments. The higher the ratio, the higher the credit rating, other things remaining the same, and the easier it is for the entity to obtain loans at cheaper rates.

The **debt coverage ratio** is calculated as under:

(Annual Net Income + Amortization/Depreciation + Interest Expense + other non-cash and discretionary items (such as non-contractual management bonuses)) / (Principal Repayment + Interest payments + Lease payments)

Since the financial data with regard to principal’s payment is not available with TRAI, this ratio has not been computed. However, one of the elements in the debt coverage ratio is interest payments. The interest coverage ratio can furnish an idea about the debt servicing capacity of a company as is elaborated below.

INTEREST COVERAGE RATIO:

This ratio measures the debt servicing capacity of a company in so far as interest on borrowings/ loans is concerned i.e. it measures the ability to pay interest on borrowings/ loans. It is determined by dividing the profit before finance charges and taxes (PBIT) by the interest charges on loans. The lower the interest coverage ratio, the higher the company's debt burden and the greater the possibility of default by the company in making interest payments on borrowings. A higher ratio indicates better financial health as the company is more capable of meeting its interest obligations from operating earnings. Ideally the interest coverage ratio should be greater than or equal to 1.

The interest coverage ratio of telecom access service providers during the last five years is given below:

Table 12

Interest Coverage Ratio (in times)				
2007-08	2008-09	2009-10	2010-11	2011-12
4.09	2.45	1.06	0.17	-0.41
Interest coverage ratio: PBIT / Interest charges				

The above table indicates that the interest coverage ratio of the telecom service sector (access services) during the last two years 0.17 & -0.41is abnormally low due to low (negative in 2011-12) profitability and this is a cause of concern for the industry.

COST OF DEBT:

Profitability of the private telecom access service companies and the overall interest i.e. finance charges (Interest Expenses+ Foreign exchange fluctuation+ other finance charges) paid by them over the last five years are tabulated below:

Table 13

Profitability and Finance Charges in the Telecom Sector (Rs. in crore)					
	2007-08	2008-09	2009-10	2010-11	2011-12
Profit Before Finance Charges and Tax (PBIT)	14972.44	14870.03	6852.46	1320.85	-5945.75
Finance Charges*	4311.80	8570.94	5252.24	9749.85	17433.51
* Interest Expenses+ Foreign exchange fluctuation+ other finance charges					

The cost of debt measures the finance charges being paid for the use of debt by the company. The cost of debt is finance charges paid by the company, as a ratio of total debt. The rising cost of debt of the telecom service sector (access services) during the last five years is indicated in the table below:

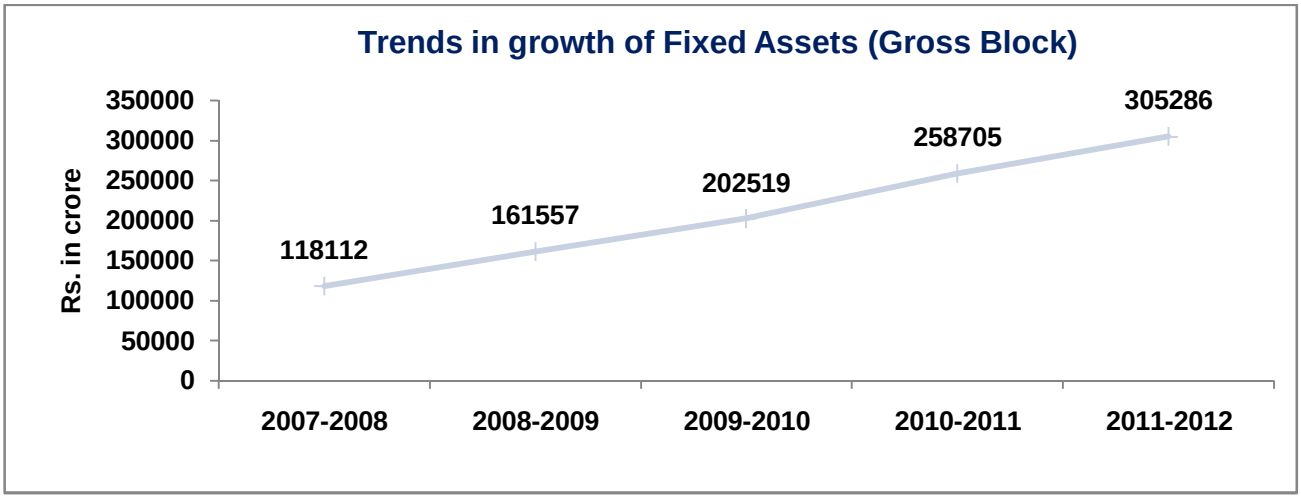
Table 14

Cost of Debt (in %)				
2007-08	2008-09	2009-10	2010-11	2011-12
6.04	7.88	4.80	5.95	10.24
Cost of Debt: Finance Charges / Total debt x 100				

(D) INVESTMENT IN FIXED ASSETS:

The total Fixed Assets (Gross Block) of the telecom service sector (access services)have gone up from Rs. 118112 crore in 2007-08 to Rs.305286 crore in 2011-12, as indicated in the chart below:

Chart 12



FIXED ASSETS TO DEBT RATIO:

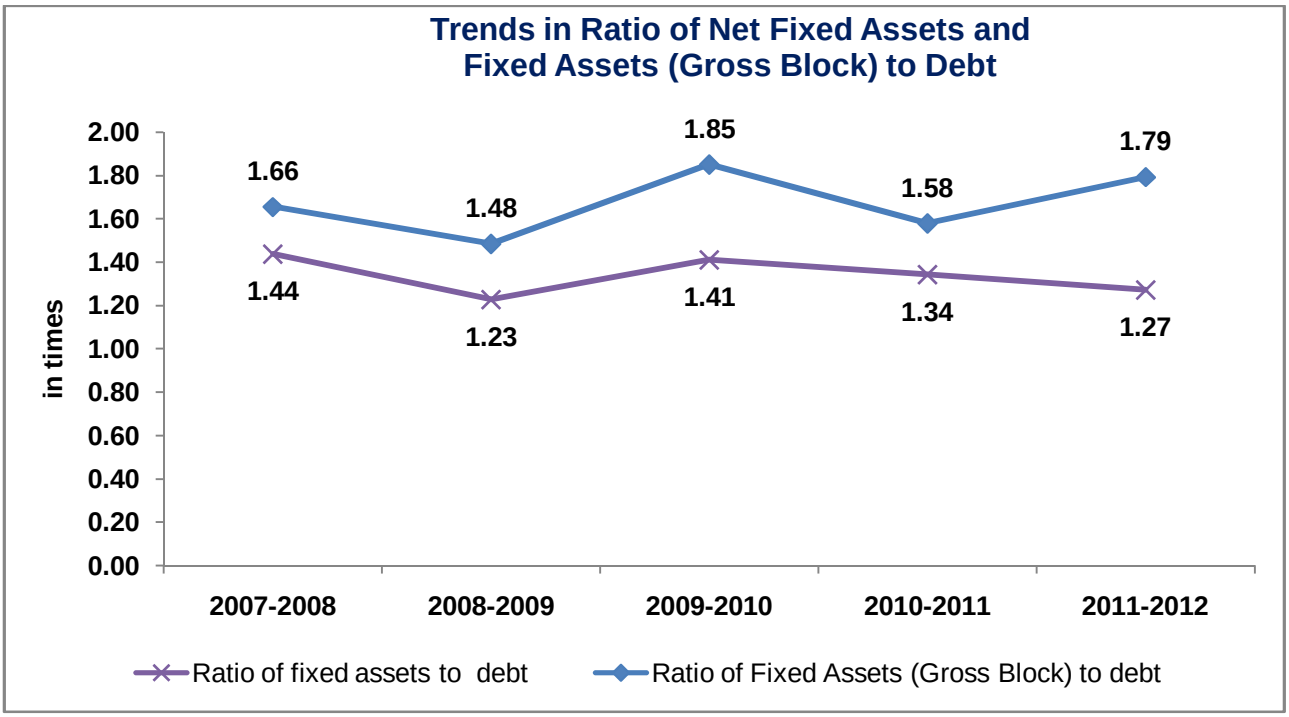
This ratio measures the relationship between the fixed assets and the debt and is very useful to long-term creditors of a company. This ratio shows how many times of debt the fixed assets of the company are. A lower ratio indicates that a considerable proportion of assets are being funded with debt, while a high ratio indicates that the bulk of asset funding is coming from equity or owners funds. A lower ratio also indicates that a company may be putting itself at risk of not being able to pay back its debts.

The ratio of fixed assets (gross block) to debt of the telecom service sector (access services) has gone up from 1.66 in 2007-08 to 1.79 in 2011-12 on the other hand the ratio of net fixed assets to debt has gone down from 1.44 in 2007-08 to 1.27 in 2011-12 probably due to development/ change in the technology, leading to an increase in the % share of accumulated depreciation from 31% in 2007-08 to 34% of fixed assets (gross block) in 2011-12.

Table 15

Fixed Assets to Debt (in times)	2007-08	2008-09	2009-10	2010-11	2011-12
Ratio of Fixed Assets (Gross Block) to Debt	1.66	1.48	1.85	1.58	1.79
Ratio of Net Fixed Assets[5] to Debt	1.44	1.23	1.41	1.34	1.27

Chart 13



***PROPRIETARY RATIO**:*

This ratio establishes the relationship between shareholder's funds to total assets[6] of the firm. It is an important ratio for long-term solvency of a company. The ratio indicates how much of the total assets are financed through shareholders' funds and how much through outsiders' funds. The higher the ratio

[5] Net fixed assets comprises of net block, CWIP, pre-operating expenditure pending allocation/ Decommissioned Assets

[6] Total assets comprises of Net Block, CWIP, pre-operating expenditure pending allocation/ decommissioned assets, investments, deferred tax assets, current assets, loans &advances

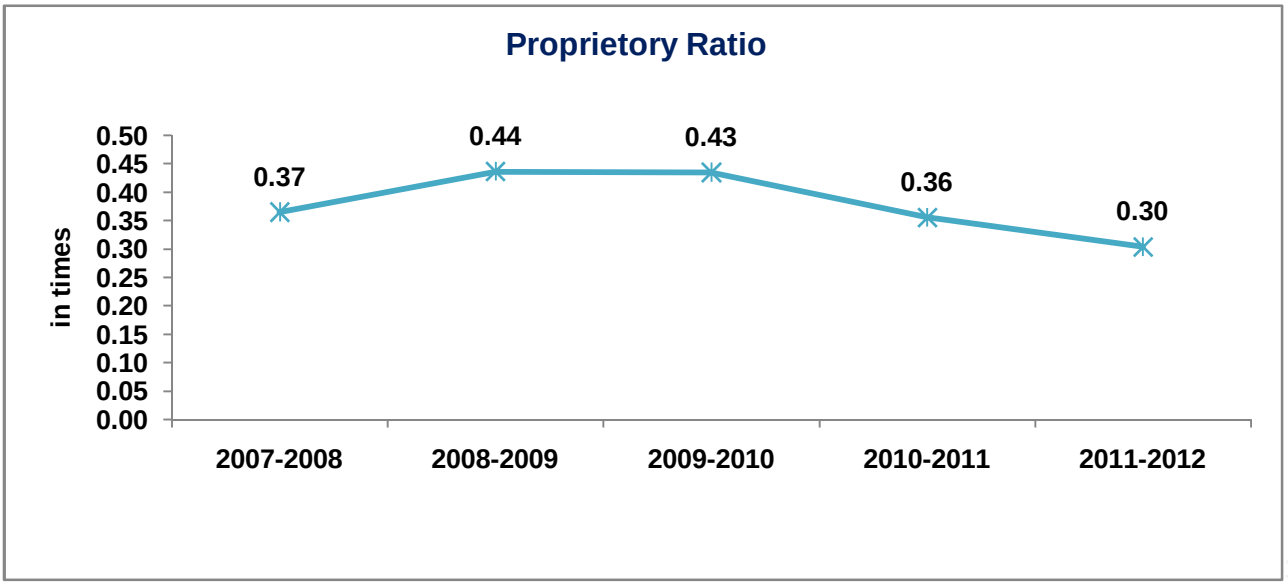
or the greater the share of shareholders in the total capital of the company, the better is the long-term solvency position of the company.

The proprietary ratio of the telecom service sector (access services) during the last five years is given below:

Table 16

Proprietary Ratio (in times)				
2007-08	2008-09	2009-10	2010-11	2011-12
0.37	0.44	0.43	0.36	0.30
Proprietary ratio: Shareholders Funds /Total Assets				

Chart 14



(E) RESERVES & SURPLUS:

Reserves and Surplus are constituted of General Reserves i.e. the aggregate amount of corporate earning that has been reinvested in the business, the surplus transferred from the profit and loss account, the share premium reserve and other reserves created by revaluation of assets or restructuring of business or for specific purposes. The term Reserves and Surplus does not automatically connote cash. In fact, a company can have large Reserves and Surplus and little cash or it can have plenty of cash and very small Reserves and Surplus.

Reserves can be used for future growth and expansion of the business; however, certain reserves are set aside for specific purposes, or they represent book adjustments to depict the impact of mergers& acquisitions or revaluation of assets. Reserves & Surplus include the following kinds of components:

(i) General Reserve
(ii) Profit & Loss Account
(iii) Capital Reserve
(iv) Securities Premium Reserve
(v) Revaluation Reserve
(vi) Debenture Redemption Reserve
(vii) Reserve for business restructuring
(viii) Employee Stock Option Plan (ESOP)
(ix) Other Reserves

Out of all the components of Reserves &Surplus, only the General Reserve and Profit& Loss Account (credit balance) represent retained earnings that can be used for growth and expansion of business; these are also called free reserves. Other components of Reserves &Surplus can be used only for the specific purpose for which the reserve has been created. Further, Revaluation Reserves and Reserves for Business Restructuring represent adjustment entries in the books and do not translate into actual reserves till the revalued assets are disposed off and the excess revalued amount is realized by the company.

Sometimes companies show a huge amount as Reserves & Surplus in their balance sheet, created by revaluation of assets or business restructuring. These figures of Reserves & Surplus do not convey a correct picture of the financial soundness of the company. It is therefore important to further examine the share of different components of Reserves & Surplus to understand how much of these Reserves are available for growth and expansion of business. The percentage share of different components of Reserves & Surplus of the telecom service sector (access services) during the last five years is exhibited in the table below:

Table 17

Component wise share of different types of reserves in Reserves & Surplus					
Types of Reserves	2007-08	2008-09	2009-10	2010-11	2011-12
Capital Reserve	0.21%	0.10%	0.28%	0.40%	0.50%
Security Premium	62.54%	43.63%	43.09%	48.44%	64.55%
General Reserve	19.37%	40.24%	40.77%	41.43%	51.43%
Other Reserve	9.22%	4.27%	4.09%	4.45%	5.89%
Profit & Loss Account	8.66%	11.77%	11.76%	5.28%	-22.36%

Free Reserves (i.e. the General Reserve and Profit & Loss Account (credit balance)) are 29% of total Reserves &Surplus in 2011-12.

Another way of measuring the adequacy of Reserves is to calculate the ratio between Reserves and equity share capital. The ratio of Total Reserves and Free Reserves to equity share capital of telecom service sector (access services) of last five years is exhibited in the table below:

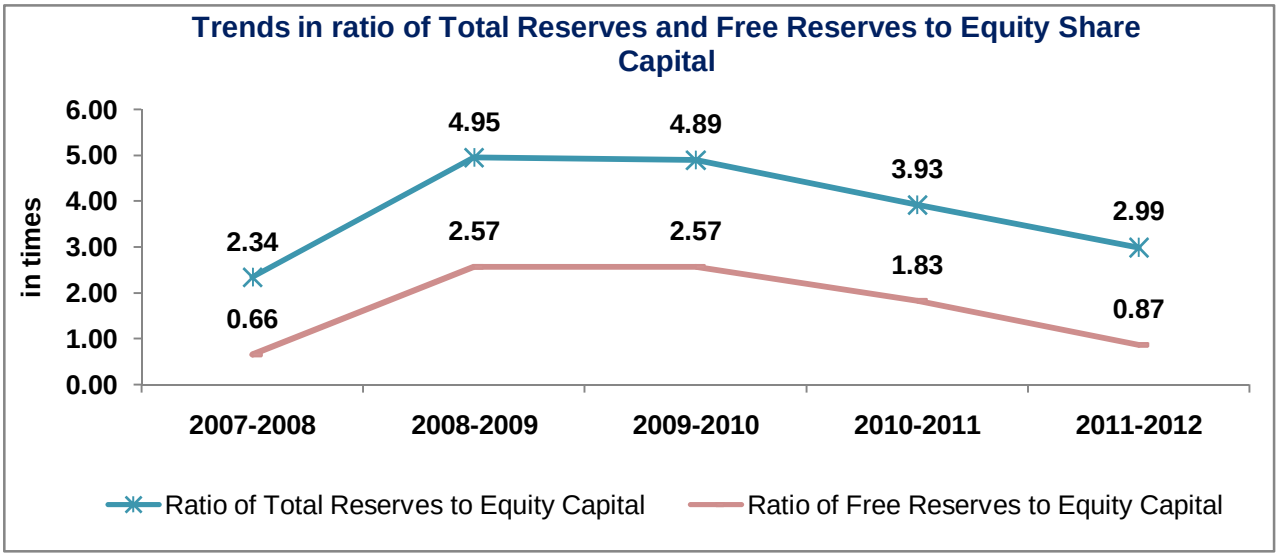
Table 18

Ratio of Total Reserves and Free Reserves to Equity Capital (in times)					
	2007-08	2008-09	2009-10	2010-11	2011-12
Ratio of Total Reserves to Equity Capital	2.34	4.95	4.89	3.93	2.99
Ratio of Free Reserves to Equity Capital	0.66	2.57	2.57	1.83	0.87

Although the Total Reserves are 2.99 times of equity share capital in 2011-12, Free Reserves are only 0.87 times of equity capital in the same year.

The chart below depicts the trends in the ratios of Total Reserves and Free Reserves to Equity Capital for the telecom (access service) sector:

Chart 15



(F) CAPITAL STRUCTURE & PROFITABILITY OF 5 MAJOR TELECOM ACCESS SERVICE PROVIDERS

The capital structure, debt-equity ratio, capital gearing and profitability profile of 5 major private telecom access service companies for 5 years have been discussed in the following section.

Capital Structure and Gross Block:

The company-wise capital structure and gross block of these companies for the last five years is exhibited in the table below:

Table 19

Details of Capital Structure & Fixed Assets

(Rs. in crore)

TSPs		2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	Share capital	2141	2149	2149	2149	2149
	Total reserves & surplus	19019	27009	36726	44608	50470
	Total Debt	6758	7886	5039	11898	14129
	Fixed Assets (Gross Block)	30003	39877	47393	65386	71120
Vodafone	Share capital	3208	3208	3208	3208	3208
	Total reserves & surplus	9991	9919	9113	5449	2975
	Total Debt	14630	23161	25835	42135	45332
	Fixed Assets (Gross Block)	21220	28786	33482	44436	49145
Idea	Share capital	2635	3100	3300	3303	3309
	Total reserves & surplus	911	8194	8157	9027	9626
	Total Debt	6515	7579	6526	10557	12096
	Fixed Assets (Gross Block)	13204	15563	22834	28939	36032
Reliance	Share capital	1112	1112	1112	1112	1112
	Total reserves & surplus	24127	50797	49560	46987	44180
	Total Debt	21864	40955	30645	35538	31195
	Fixed Assets (Gross Block)	24536	41469	43549	45273	59046
Tata	Share capital	9076	6877	6042	6361	6610
	Total reserves & surplus	-9304	3014	1382	-1037	-4748
	Total Debt	11648	14690	15873	22303	23986
	Fixed Assets (Gross Block)	17974	19578	26458	36049	38601

In the last five years, Bharti, Vodafone and Reliance did not show any change in their share capital. Tata has registered a decline in share capital by 27% in 2008-09. The share capital of Idea has increased from Rs. 2635 crore in 2007-08 to Rs. 3309 crore in 2011-12. Idea is the only service provider showing growth in share capital by 26%.

Total Reserves and Surplus in respect of Vodafone have declined from Rs. 9991 crore in 2007-08 to Rs. 2975 crore in 2011-12 whereas the total Reserves and Surplus of other companies have shown increase. As on 31st March 2012, Bharti had the highest Reserves and Surplus of Rs. 50470 crore. Reserves and Surplus of Reliance doubled from Rs 24,127 crore in 2007-08 to Rs 50797 crore in 2008-09, mainly due to the transfer of net amount of Rs. 27031 crore under the Scheme of Amalgamation under sections 391 to 394 of the Companies Act, 1956, whereby Reliance Gateway Net Ltd. was amalgamated into RCom and Rs. 4335 crore on account of change in exchange rate in RCom. Tata has negative Reserves and Surplus of Rs. 4748 crore in 2011-12.

From 2007-08 to 2011-12, the Fixed Assets (Gross Block) of all the five companies has increased because of expansion of their networks and creation of footprints in new LSAs especially in the case Idea and Vodafone.

Total debt of all the companies has increased over the period. As on 31st March 2012, Vodafone has the highest debt of Rs. 45332 crore followed by Reliance at Rs. 31195 crore and Tata at Rs. 23986 crore. Vodafone and Tata have shown persistent increase in debt during the last five years whereas other three service providers have shown fluctuating trends in debt. In 2011-12 as compared to 2009-10, all service providers have increased debt.

Total Debt to Equity Ratio:

Total debt (long-term & short-term) to equity ratio of the 5 TSPs are exhibited in the table below:

Table 20

Total Debt to Equity Ratio

(in times)

TSPs	2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	0.32	0.27	0.13	0.25	0.27
Vodafone	1.11	1.76	2.10	4.87	7.33
Idea	1.84	0.67	0.57	0.86	0.94
Reliance	0.87	0.79	0.60	0.74	0.69
Tata	-51.19*	1.49	2.14	4.19	12.89
Mean	**-9.41**	**1.00**	**1.11**	**2.18**	**4.42**
Median	**0.87**	**0.79**	**0.60**	**0.86**	**0.94**

Total Debt-Equity ratio: Total Debt/Shareholder's funds
* negative debt-equity ratio due to the huge accumulated losses

It is evident that Tata and Vodafone are highly indebted companies with total debt-equity ratio of 12.89 and 7.33 times respectively. The debt-equity ratio of Bharti, Idea and Reliance decreased in 2011-12 over the year 2007-08; however, for all the companies, debt equity ratio in 2011-12 was higher than in 2009-10.

Fixed Assets to Debt Ratio:

The fixed assets (gross block) to debt ratio of these companies are as follows:

Table 21

Fixed Assets to Debt Ratio (in times)					
TSPs	2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	4.44	5.06	9.41	5.50	5.03
Vodafone	1.45	1.24	1.30	1.05	1.08
Idea	2.03	2.05	3.50	2.74	2.98
Reliance	1.12	1.01	1.42	1.27	1.89
Tata	1.54	1.33	1.67	1.62	1.61
Mean	2.12	2.14	3.46	2.44	2.52
Median	1.54	1.33	1.67	1.62	1.89
Ratio of Fixed Assets (Gross Block) to debt: Fixed Assets (Gross Block)/ Debt					

The fixed assets (Gross Block) to debt ratio of all the companies have increased over the last five years except in the case of Vodafone. This indicates that while Vodafone is very aggressive in financing through debt (total debt of Vodafone has gone up by 210% over the period), not all the debt is invested in fixed assets (total fixed assets (gross block) have increased by 132% over the same period). Between 2009-10 and 2011-12, the fixed assets (Gross Block) to debt ratio of all the companies except Reliance have decreased.

Capital Gearing Ratio:

The capital gearing ratio of these TSPs are as indicated in the table below:

Table 22

Capital Gearing Ratio (in times)					
TSPs	2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	3.13	3.70	7.71	3.93	3.72
Vodafone	0.90	0.57	0.48	0.21	0.14
Idea	0.54	1.49	1.76	1.17	1.07
Reliance	1.15	1.26	1.65	1.35	1.45
Tata	-0.09	0.58	0.47	0.24	0.08

Capital Gearing Ratio (in times)					
TSPs	2007-08	2008-09	2009-10	2010-11	2011-12
Mean	**1.13**	**1.52**	**2.41**	**1.38**	**1.29**
Median	**0.90**	**1.26**	**1.65**	**1.17**	**1.07**
Capital Gearing Ratio: Equity Share Capital plus Reserve & Surplus/ Loan Funds plus preference capital					

The capital gearing ratio of Bharti, Reliance and Idea show fluctuating trends in the last five years; however, the ratio has gone up in 2011-12 as compared to 2007-08. The capital gearing ratio in the case of Tata and Vodafone is very low i.e. 0.08 and 0.14 respectively in 2011-12, as against the mean and median values. From the year 2009-10 onwards, mean as well as median values of the capital gearing ratio has shown a declining trend, which indicates that these companies increasingly shifted to fixed interest/ dividend securities (loan funds and preference capital) from equity share capital for meeting their requirement of funds.

Profitability:

The profitability of the five TSPs is tabulated below:

Table 23

EBITDA[7], EBITDA Margin[8] and PBIT[9]						
TSPs		2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	EBITDA	11447	14143	14954	14448	15441
	EBITDA Margin	41.96%	38.77%	38.95%	35.12%	33.82%
	PBIT	7852	10557	10580	9516	9159
Vodafone	EBITDA	6247	5651	6228	5798	4248
	EBITDA Margin	32.77%	25.69%	23.88%	19.25%	13.27%
	PBIT	3473	2682	2615	2514	27
Idea	EBITDA	2272	2780	2895	3128	4313
	EBITDA Margin	33.72%	28.15%	24.26%	20.33%	22.32%
	PBIT	1395	1538	1375	1155	1750
Reliance	EBITDA	5175	4085	1507	984	3018
	EBITDA Margin	35.00%	25.94%	10.19%	6.56%	20.80%
	PBIT	3118	1764	-194	-921	950

[7] Earnings before Interest, Tax, Depreciation and Amortization
[8] EBITDA/ Total Revenue
[9] Profit Before Interest and Tax

EBITDA[7], EBITDA Margin[8] and PBIT[9]						
TSPs		2007-08	2008-09	2009-10	2010-11	2011-12
Tata	EBITDA	659	757	107	535	456
	EBITDA Margin	9.20%	9.52%	1.23%	4.65%	3.61%
	PBIT	-1194	-1328	-2485	-2153	-2275

There is a fall in the EBITDA Margin for almost all the TSPs over the last five years.

EBITDA of Bharti has gone up from Rs. 11447 crore in 2007-08 to Rs. 15441 crore in 2011-12; however EBITDA margin has fallen from 41.96% in 2007-08 to 33.82% in 2011-12. EBITDA of Vodafone and Reliance has declined from Rs. 6247 crore and Rs. 5175 crore in 2007-08 to Rs. 4248 crore and Rs. 3018 crore in 2011-12 respectively.

PBIT of Vodafone has declined very sharply from Rs. 3473 crore in 2007-08 to Rs. 27 crore in 2011-12. PBIT of Tata is *negative* throughout the period and has declined progressively from Rs. 1194 crore to Rs. 2275 crore over the last five years.

PBIT of Reliance declined during 2008-09 and became negative in 2009-10 and 2010-11; however it has improved and become positive in 2011-12.

Interest Coverage Ratio:

The interest coverage ratio of these TSPs is depicted in the table below:

Table 24

Interest Coverage Ratio					(in times)
TSPs	2007-08	2008-09	2009-10	2010-11	2011-12
Bharti	35.35	44.53	92.47	95.41	7.68
Vodafone	3.36	1.63	1.05	0.75	0.01
Idea	3.18	1.85	2.53	3.36	2.06
Reliance	3.48	1.21	-0.15	-1.26	0.76
Tata	-1.60	-1.24	-2.22	-1.79	-1.20
Interest Coverage Ratio: PBIT/ Interest Charges					

The interest coverage ratio of all the companies except Tata decreased over the period (2007-08 to 2011-12); In the case of Tata it has slightly improved but is still negative.

Although Bharti has the highest interest coverage ratio of 7.68 in 2011-12, sharp declines in interest coverage ratio are seen between 2010-11 to 2011-12 in the case of Bharti and Vodafone.

(G) CHALLENGES AND STRATEGIES

After their initial success, Indian telecom companies are confronted today with serious growth challenges. The sector is characterized by mounting competition, declining average revenue per user (ARPU) and rising costs. All these factors put tremendous pressure on operating margins. The main reasons cited by telecom service providers for declining profitability are their inability to pass on cost inflation due to hike in the price of power & fuel, debt servicing burden and the declining value of the rupee. This has been further aggravated by the prevalent tariff competition. Service providers are pinning hopes on future improvements in profitability as data use grows in the next 5-7 years with proliferation of smart phones especially amongst the younger generation.

The following are some of the major challenges before Indian telecom companies:

(i) Core businesses must operate at full potential
(ii) Existing markets have to be defended and new markets developed
(iii) Resources must be utilized efficiently and costs controlled
(iv) Productivity and profitability need to improve
(v) Indebtedness has to be controlled

Each telecom service provider is endeavoring to focus on growth and investment, improvement of profitability and cost control without compromising on the quality of service to the customer. From TRAI's discussions with major service providers, it emerges that companies are adopting the following kinds of strategies to find their way out of the woods:

- Access service providers are now making investments very selectively. The focus is primarily on development of network and eco-system for 3G and 4G services.

- There has been a transition in the business model. The shift is towards an outsourcing model where various medium and long term leasing arrangements for towers and other network infrastructure have been made with the third party operators or equipment vendors. Fresh investments in infrastructure are replaced by operating expenditure of a predetermined amount for a fixed period of time.

- Many operators are exploring opportunities to maximize sharing of passive infrastructure in the short- term and are initiating efforts to share active infrastructure over the longer term.

- Some operators are outsourcing their unutilised network capacity and infrastructure. The challenge lies in fashioning appropriate network outsourcing and infrastructure-sharing agreements.

- 2G ICR arrangements are extensively employed. Idea, after the cancellation of licenses in 7 LSAs, has made 2G ICR arrangements with Airtel and Vodafone to continue operations in these LSAs without committing new OPEX and investment. Airtel has ICR arrangements with Vodafone and others in LSAs where the company does not have its own network infrastructure.

- Most companies are seeking to lower customer acquisition costs through sales and marketing strategies that target prepaid subscribers- introduction of self-service methods, utilization of

lower-cost distribution channels such as convenience stores for the sales of low-cost, prepaid products etc.

- Offshore select customer care capabilities are being outsourced to global providers (BPOs).
- Indian telecom companies have made significant payments for acquisition of licences and, purchase of 3G& BWA spectrum. They have also put in resources for deploying additional network and new technologies. Mobile number portability has introduced a new dimension to competition, compelling the TSPs to invest more for improving quality of service to retain customers. As part of the drive to generate sufficient inflows to recoup their investments, companies are designing call /tariffs plans in such a manner that fixed costs at least are recovered.

CONCLUSION:

Low market tariffs and the presence of large number of service providers in each licence service area have caused profitability to decline and made the telecom sector less attractive for infusion of equity. New investments are therefore being financed through debt. Sector indebtedness is growing. However, the debt-equity ratio of the sector has not as yet reached alarming proportions. On the other hand, the declining profitability of the sector, which lies at the root of the inability to attract fresh investment, is a cause for deep concern.

It should be noted that negative interest coverage ratio carries a potential risk of default. It also indicates that some portion of debt is being utilized for interest payments and other liabilities rather than for acquisition of new assets, which potentially places the companies in a debt trap. Replacing debt financing by equity financing could help increase profitability by reducing interest burden.

In order to turn around the financing pattern and the deteriorating profitability position of the sector, apart from measures and strategies of individual companies, clarity needs to emerge on the following policy issues and optimal utilization of resources:

- o Emergence of an enabling environment for Mergers and Acquisitions to aid in market consolidation;
- o Permission and policy framework for sharing, trading and sale of underutilized or unutilized spectrum by service providers so that spectrum is optimally utilized;
- o Liberalization of spectrum usage to enable flexibility in deployment of alternative technologies;
- o Improvement in the availability of power to run telecom networks so that network operations require less fuel and captive power generation.

ANNEXURE A

Sl. No.	List of companies
1.	Aircel Ltd. (A.Y. Dec)
2.	Aircel Cellular (A.Y. Dec)
3.	Bharti Airtel
4.	Bharti Hexacom
5.	Dishnet Wireless (A.Y. Dec)
6.	Idea Cellular
7.	Loop Mobile
8.	Loop Telecom
9.	Quadrant Televentures
10.	Reliance Communications
11.	Reliance Telecom
12.	Sistema Shyam
13.	Tata Teleservices
14.	Tata Teleservices (Maharashtra)
15.	Unitech Wireless (Tamilnadu)
16.	Videocon
17.	Vodafone Cellular
18.	Vodafone Digilink
19.	Vodafone East
20.	Vodafone India
21.	Vodafone Mobile Services
22.	Vodafone South
23.	Vodafone Spacetel
24.	Vodafone West