# Фінанси та оподаткування

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# САНДІП ҐОЕЛ

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# Поведінка правління по відношенню до прибутку в телекомунікаційному секторі Індії: огляд компаній «MTNL» і «Bharti Airtel» Ltd

Поведінка правління стосовно прибутку є ключовою проблемою для кожного акціонера. Вона викликана зростаючими випадками корпоративного шахрайства на світовому рівні, яке визначається розміром нарахувань, здійснюваних правлінням, оскільки це є основою управління доходами. Телекомунікаційний сектор, будучи частиною сфери послуг, більш вразливий до такого управління прибутком на свій розсуд.

Таким чином, в даній статті зроблена спроба висвітлити поведінку правління у ставленні до прибутку в телекомунікаційному секторі Індії, шляхом порівняння компаній «MTNL» і «Bharti Airtel». «MTNL» є провідною компанією в державному секторі, в той час як «Airtel» є провідною компанією приватного сектора. Ці компанії були обрані, щоб краще оцінити поведінку правління двох провідних, абсолютно несхожих, підприємств по відношенню до прибутку. Управління прибутком проаналізовано по п'яти галузевих характеристиках, а саме за: (а) якістю прибутку, (б) якістю доходів, (в) нестабільності доходів, (г) дискреційними нарахуваннями та (д) випадками махінацій. Автор сподівається, що отримані висновки допоможуть інвесторам стати більш обізнаними з механізмами управління прибутком і дозволять краще проаналізувати цифри у фінансових звітах.

**Ключові слова:** управління прибутком, якість прибутку, якість доходів, дискреційні нарахування, телекомунікаційний сектор.

САНДИП ГОЕЛ

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# Поведение правления в отношении к прибыли в телекоммуникационном секторе Индии: обзор компаний «MTNL» и «Bharti Airtel» Ltd

Поведение правления в отношении прибыли является ключевой проблемой для каждого акционера. Эта проблема вызвана растущими случаями корпоративного мошенничества на мировом уровне, которое определяется размером начислений, осуществляемыми правлением, поскольку это является основой управления доходами. Телекоммуникационный сектор, являясь частью сферы услуг, более уязвим к такому управлению прибылью по своему усмотрению.

Таким образом, в данной статье предпринята попытка осветить поведение правления в отношении к прибыли в телекоммуникационном секторе Индии, путем сравнении компаний «MTNL» и «Bharti Airtel». «MTNL» является ведущей компанией в государственном секторе, в то время как «Airtel» является ведущей компанией частного сектора. Эти компании были выбраны, чтобы лучше оценить поведение правления двух ведущих, совершенно несходных, предприятий по отношению к прибыли. Управление прибылью было проанализировано по пяти отраслевым характеристикам, а именно: (а) качеству прибыли, (б) качеству доходов, (в) нестабильности доходов, (г) дискреционных начислениях и (д) случаях махинаций. Автор надеется, что полученные выводы помогут инвесторам стать более осведомленными об управлении прибылью и позволят лучше проанализировать цифры в финансовых отчетах.

**Ключевые слова:** управление прибылью, качество прибыли, качество доходов, дискреционные начисления, телекоммуникационный сектор.

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# Earnings Management Behaviour of Telecom India: A Review of MTNL and Bharti Airtel Ltd.

Earnings behaviour of the management is the key concern for every shareholder. This has assumed importance on account of increasing number of corporate frauds at the global level. It is identified by the level of accruals exercised by the management as it forms the basis of earnings management. Telecom sector being a part of service sector is more vulnerable to this discretionary earnings behaviour. Therefore, the present paper attempts to highlight earnings management behavior in Indian telecom sector on comparative basis of MTNL and Bharti Airtel. MTNL is a leading public sector company, whereas Airtel is a leading private sector company. They have been chosen to appreciate better the different earnings' behavior in two diverse leading enterprises. Earnings management has been analyzed using five industry practices, viz. (i) quality of earnings, (ii) quality of revenue, (iii) volatility of income, (iv) discretionary accruals, and (v) manipulation score. It is hoped that the findings would make investors' more aware about earnings management and help them analyze the reported numbers better.

**Keywords:** earnings management, quality of earnings, quality of revenue, discretionary accruals, telecom sector.

#### THE PROBLEM

Earnings management has been predominant since the inception of business. The earnings management literature attempts to understand what is the earnings behaviour of the corporate, how managers manipulate earnings, and the consequences of this behavior. These questions are the focus of every accounting research.

Earnings management is the process of using personal choices within the given accounting principles so as to achieve a desired level of reported earnings. It is claimed by the management that it is in the interests of the company. Researchers like (Healy & Wahlen, 1999; Public Oversight Board, 2000; Beneish, 2001; Jones, 2011) believe earnings management is not just unethical but a financial reporting fraud.

For manipulation of earnings, managers have a variety of choices to increase or decrease earnings. For example, managers can use specific accounting policies for inventory valuation, depreciation method or the treatment of bad-debt provision; all leading to manipulation of earnings. Researchers have tried to detect earnings management by dividing the accruals into two parts: discretionary and non-discretionary accruals.

The present study contributes by extending the discretionary accruals exercise to quality aspect of earnings and revenue in Indian context, which has not been done before.

#### LITERATURE REVIEW

(The Public Oversight Board, 2000) noted that the term earnings management covers a wide variety of legitimate and illegitimate actions by management that affect an entity's earnings. Illegitimate actions may involve intentionally recognizing or measuring transactions or recording fictitious transactions which both constitute fraud.

Managers can use discretionary accruals, shifting revenue between periods or deferring recognition of expenditures (Healy 1985; Jones 1991; Dechow et al. 1995). Researchers have also detected earnings management through real transactions (Schipper, 1989),

income-smoothing (Imhoff, 1977) and benchmark beating (Burgstahler and Dichev, 1997).

(Skinner, 1993) examined the relationship between accounting choices and the investment opportunity set and found that firms with bonus plans are more likely to select income-increasing procedures. (Teoh et al., 1998) compared initial public offering (IPO) firms to non-IPO firms, and found that IPO firms are more likely to choose an income-increasing depreciation method than the matched pair of non-IPO firm.

In addition to examining the association between cash incentives and earnings management, prior research has also documented the association between equity incentives and earnings management. For example, (Warfield, Wild, and Wild, 1995) find that the magnitude of discretionary accruals is inversely related to managerial ownership. They also find that managerial ownership is less important for regulated corporations, which, in turn, suggests that the regulatory process may be a monitoring mechanism for managers' accounting choices.

A fundamental element of any test for earnings management is a measure of management's discretion over earnings. The literature has followed several approaches, with varying characteristics. First, there is a large literature that attempts to identify discretionary accruals based on the relation between total accruals and hypothesized explanatory factors. This literature began with (Healy, 1985) and (DeAngelo, 1986), who used total accruals and change in total accruals, respectively, as measures of management's discretion over earnings.

(Jones, 1991) introduced a regression approach to control for nondiscretionary factors influencing accruals, specifying a linear relation between total accruals and change in sales and property, plant and equipment.

#### Gap Areas

One implication of the above review is that analyzing earnings management behaviour is very fruitful area for academic research in Indian perspective, particularly in a service sector like

### Фінанси та оподаткування .

telecom sector. The studies in the past have analyzed the earnings behviour with the help of accounting choices, in the form of accruals, exercised by the management. Also, these have focused mainly on international arena.

#### **Contribution of the Study**

- § This research study has been conducted to analyze earnings behaviour with regard to earnings management practices in the Indian perspective. It focuses on how the number and size of financial statement manipulations are increasing and how to identify the early warning signs that the company is in trouble or hiding a problem before the damages become irreversible in the telecom sector in India.
- § Discretionary accruals' analysis has been further evaluated with quality aspect of earnings and revenue in Indian context. It makes study more meaningful by increasing shareholders' awareness about these grey areas.

#### **OBJECTIVE OF THE STUDY**

The study specifically aims at the following:

- To analyze earnings management behaviour among the units on the basis of quality of earnings and quality of revenue.
- To explore further by testing the volatility of income.
- To examine the magnitude of discretionary accruals in regard to potential earnings management.
- To compute the manipulation score with the help of Beneish profit model.
- To highlight the major areas of concern in the accounting in these undertakings for their future viability.

### Research methodology & analysis of the study

Research methodology

Following are the main aspects of the research methodology used in the present study:

Sample design

The present study covers the companies in the telecom sector in India. The telecom sector is more vulnerable to financial creativities on account of its volatility to internal and international economic scenario.

The enterprises have been chosen on comparative basis. The reasons to choose these two companies are:

- o They are both leading companies in public and private sector respectively. A comparison of leading companies always results in meaningful result orientation.
- o MTNL and Bharti Airtel Ltd. both have the similar kinds of products/services in the market. For e.g. they both are in fixed and mobile communication and in addition to this they provide broadband facilities to its consumers.
- o Their respective asset holding is quite near to each other.
- o Since MTNL is owned by the government and Bharti Airtel Ltd. is a private sector company, it would cover the telecom industry from both perspectives.
- o Both of these companies are holding companies in other companies.

Period of the study

The period to be covered in the present research study would be of five years, ranging from 2004-05- to 2008-09. it has been taken as:

- (a) It covers both pre-and post recessionary trends for earnings management, and
- (b) A five year period is reasonably long enough to reveal the short-term and long-term changes and permit the valid conclusions thereof.

Therefore, the choice of the research period has not been a matter of an arbitrary decision.

Data used

For the purpose of the present study, the main data used is secondary in nature, keeping in view the nature of the study. The study employs both accounting and market data. The accounting data was obtained from the annual reports of the units and other such records for the relevant period. Market data for the units was obtained from the best site.

Tools / techniques used

#### Quality of earnings

To estimate the extent of creative accounting, Quality of Earnings of the Firm is used. It can be found out by computing the percentage of operating cash flows to net income of a firm. Higher the quality of earnings, lower the chances of earnings manipulation.

Quality of revenue

Quality of revenue is another important determinant in determining earnings manipulation. It can be found out by computing the percentage of collection of sales in cash. Higher the quality, lesser the chances of earnings manipulation.

Volatility of operating income & sales

Volatility in operating income and sales is an indication of the business risk of the company. High volatility is undesirable and is not a good sign. Here, it is calculated as:

Volatility of a variable = Std Deviation (operating income/ Sales)/ Avg of operating income/ Sales

The DeAngelo Model

It is considered here for computing discretionary accruals as it is comprehensive and yet simple in approach. It is given below.

$$DACit = \frac{(TA_{it} - TA_{it-1})}{A_{it-1}}$$

where.

DACit is discretionary accruals for firm i in period t; TAit and Ait-1 are total accruals and total assets for

period t and t-l for firm i.

Beneish Profit model

It has been extensively used in the present study for finding out the manipulation score. Beneish uses the five financial statement variables designed to capture distortions in financial statement data to assess the probability of detection are:

(a) Day's sales in receivables index - measuring whether changes in receivables are in time with changes in sales.

- (b) Gross margin index assessing whether gross margins have deteriorated, a negative signal about a firm's prospects.
- (c) Asset quality index measuring changes in the risk of assets realization, with an increase to be interpreted as indicating an increased propensity to capitalize and therefore defer costs.
- (d) Sales growth index measuring growth in sales with respect to previous year to find out whether company is adding fake sales.

(e) Total accruals to total assets - measuring the extent to which earnings are cash-based, with high increases in non-cash working capital to reflect possible manipulation.

Manipulation Index (y) = -4.840 + 0.920\*(DSRI) + 0.528\*(GMI) + 0.404\*(AQI) + 0.892\*(SGI) + 4.670\*(TATA)

#### **Analysis and Discussion**

#### (a) Quality of Earnings

The quality of earnings of the sample companies is discussed below in table and figure 1.

Table 1: Earnings Quality of Sample Companies for 2004-05 to 2008-09

Company	2004-05	2005-06	2006-07	2007-08	2008-09	Average
MTNL	127.86%	36.76%	52.46%	423.90%	737.98%	275.79%
Airtel	170.45%	189.74%	205.98%	237.03%	286.83%	218.00%

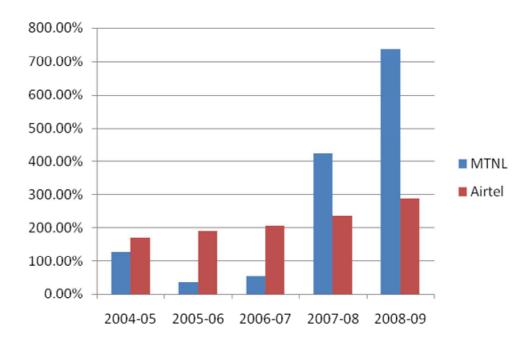


Figure 1: Earnings Quality trend of Sample Companies

While Quality of earnings of Airtel have remained stable over 5 years but that of MTNL are highly volatile and have been very low in 2005-06 and 2006-07 while rising rapidly in 2008-09.

A closer look at the cash flow statement and P&L account of MTNL shows that both the profits and cash

flow of MTNL have been decreasing and the company is not in good health, while Airtel is able to maintain its cash flow well above PAT regularly.

#### b) Revenue Quality

The quality of revenue is analyzed in the following discussion in table and figure 2.

Table 2: Revenue Quality of Sample Companies for 2004-05 to 2008-09

Company	2004-05	2005-06	2006-07	2007-08	2008-09	Average
MTNL	-1.93%	5.67%	9.72%	0.50%	0.50%	2.89%
Airtel	-0.16%	-3.59%	-4.10%	-3.19%	-2.59%	-2.73%

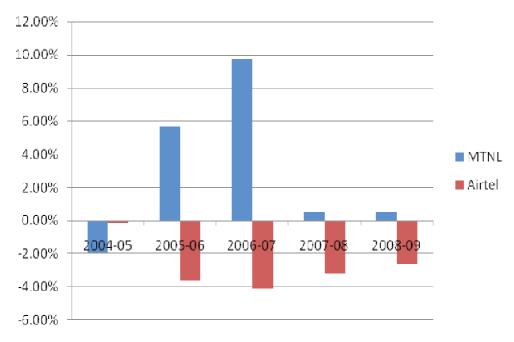


Figure 2: Revenue Quality trend of Sample Companies

Quality of revenues of MTNL and Airtel both have been volatile over the years.

This may be due to the large credit period or delayed collections in telecom industry

(c) Degree of Volatility of Operating Income
The volatility of operating income is computed
and discussed in table 3, as follows:

Table 3: Volatility of Operating Income of Sample Companies for 2004-05	5 to 2008-09
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	2008-09	2007-08	2006-07	2005-06	2004-05	Std. Dev	Avg.	Vol.
	MTNL							
Operating Profit	1,213.28	1,518.30	1,693.59	1,345.13	1,839.23	253.3193	1,521.91	0.166449
Net Cash from Operations	1562.45	2487.81	357.64	213.31	1212.71	931.0743	1166.784	0.797983
	Airtel							
Operating Profit	15,570.16	11,391.26	7,437.04	4,213.22	2,945.15	5208.919	8,311.37	0.626722
Net Cash from Operations	13711.56	12324.41	8466.36	4869.93	3509.78	4467.609	8,576.41	0.520918

Company	Volatility
MTNL	20.86%
Airtel	120.31%

CFO and PAT of MTNL have been inconsistent even decreasing in some periods. But, CFO and PAT of Airtel have been rising consistently. This has resulted in desired high volatility for Airtel.

# (d) Discretionary Accruals

In this discussion in table and figure 4, we further verify the earnings management behaviour with the help of the magnitude of discretionary accruals exercised by the companies and in the next section; we evaluate them on the basis of manipulation score.

211.720

1562.450

12059.37

0.046

	2004-05	2005-06	2006-07	2007-08	2008-09		
Airtel							
PAT	1223.660	2054.600	4110.340	6495.410	8044.180		
CFO	3509.780	4869.930	8466.360	12324.410	13711.560		
Total Assets	9627.610	12232.200	16939.090	32340.350	43874.820		
DAC		-0.055	-0.126	-0.087	0.005		
MTMI							

580.300

213.310

11236.77

0.058

681.740

357.640

11629.30

-0.004

Table 4: Accruals Picture of Sample Companies for 2004-05 to 2008-09



Figure 4: DAC trend of Sample companies

Since, MTNL does not have a healthy picture, therefore there provisioning is on a conservative side on average which has shown promising trends as well in 2008-09. Airtel discretionary accruals have been more or less constant.

948.430

1212.710

10943.83

# (e) Manipulation Score

As mentioned in the previous section, here we compute the manipulation score using Beneish model for the sample companies, as given in table and figure 5.

586.890

2487.810

11921.36

-0.191

Table 5: Manipula	tion Score	of Sample	Companie	s for	2004-05 to 2008-09

S. No	Ratio	Weight
1	Days Sales in receivables Index(X1)	0.92
2	Gross Margin Index(X2)	0.528
3	Asset Quality Index(X3)	0.404
4	Sales growth Index(X4)	0.892
5	Total Accruals to total asset Index(X5)	4.670

Z Score = 0.92\*X1 + 0.528\*X2 + 0.404\*X3 + 0.892\*X4 + 4.67\*X5 - 4.84

	2005-06	2006-07	2007-08	2008-09			
		MTNL					
Z Score	-5.10	-6.11	-6.79	6.01			
Normsdist	0.00	0.00	0.00	0.00			
	Airtel						
Z Score	-3.25	-3.35	-2.44	-3.27			
Normsdist	0.00	0.00	0.01	0.00			

PAT

CFO

DAC

**Total Assets** 

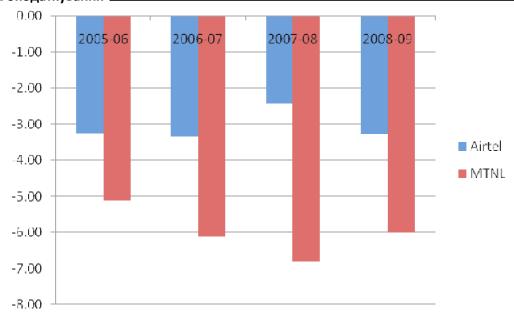


Figure 5: Manipulation Score Comparaison trend

As indicated by probability values both the companies have almost 0 probability of default. MTNL's profits and sales have been steady and falling though it does not indicate any manipulation.

## CONCLUSION & LIMITATIONS OF THE STUDY

Conclusion

It is evident from the above discussion that MTNL, being in public sector as expected doses not go for any accruals management like Airtel but the company is not in good health as both the profits and cash flow of MTNL have been decreasing.

As indicated by probability values both the companies have almost 0 probability of default. MTNL does not indicate any manipulation. Surprisingly, Airtel also does not indicate very high accruals management. It emerges out to be a better company than MTNL in terms of management.

Limitations of the study & Implications for future research

The present study could be confined to only select telecom corporate enterprises in india due to data non-availability. earnings' behaviour scope can be further examined for other companies in same sector and in other sectors as well and also for other motivational parameters in the light of growing investors' awareness about accrual reported numbers.

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