Industry Focus

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India Wireless

Myths & Realities (Part 3): TRAI Data Reveals More

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- **Key takeaways** — Following up on our previous two notes, we revisit TRAI's data (available till Dec-08) to analyze whether old trends still exist, and new data which can help understand usage patterns. Bharti remains our Top Pick.

- **#1: Highest MoUs in C circle** — Concern on quality of subscriber partially addressed with strong MoU growth witnessed in C circles. Outgoing MOUs at 245 for C circles is in fact marginally higher than the national average (241), despite the narrowing of penetration gap. Lower fixed-line penetration in C circles makes mobile the primary communication device which boosts MOU. Meanwhile, SMS usage seems to be picking up again.

- **#2: Dual network strategy is a compulsion for CDMA incumbents —** Early positioning of CDMA as a "poor man's phone" has resulted in the sub quality being a notch lower than GSM. Steady KPI divergence with current GSM ARPUs at 100% premium to CDMA means that a dual network strategy is probably essential for RCOM/Tate Tele.

- **#3: Fixed-to-mobile substitution more prevalent in rural areas** — Declining tariffs, innovative services (lifetime, micro pre-paid) and success of FWT have turned wireless into an increasingly preferred mode of communications in the rural areas. This is reflected in higher fixed-line disconnections in rural areas.

- **#4: Proportion of on-net calls varies materially across circles** — The percentage of on-net calls is directly related to market share concentration. This is the reason for C circles having higher percentage of on-net calls (70%) vs. metro (48%).

Figure 1. Statistical Abstract

		M Cap	Price (Rs)	P/E (x)		EV/EBITDA (x)	
Company name	Rating	US$M	6-Apr-09	FY09E	FY10E	FY09E	FY10E
Bharti	1L	25,101	660	15.5	12.1	8.7	6.6
RCOM	3H	9,021	218	7.5	11.8	7.7	7.6
Idea	2H	3,311	53	18.1	18.6	7.8	6.7

Source: Citi Investment Research and Analysis

See Appendix A-1 for Analyst Certification and important disclosures.

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#1: Highest MoUs in C circles

Many investors have had concerns that the new subscribers coming on the network from C circles are of low quality with limited O/G usage and hence will impact MoU/ARPU. Figures 2 & 3 dissipate some of that concern on the quality of these subscribers which have shown the strong usage trend in response to tariff cuts. This elasticity for C circle is especially strong as it comes despite a relatively higher yoy increase in penetration in these circles in the last one year, which would have (mathematically speaking) put more pressure on the average MOUs per subscriber. Lower fixed-line penetration in C circles also supports usage levels.

Figure 2. O/G MoU Trend

	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Average
Circle A	6.2%	-2.3%	0.5%	7.8%	2.1%	0.4%	0.0%	2.1%
Circle B	8.6%	-4.8%	1.4%	6.8%	6.4%	-4.4%	-1.3%	1.8%
Circle C	-0.5%	3.4%	4.7%	4.1%	5.2%	-2.5%	3.4%	2.5%
Metro	8.9%	2.3%	0.4%	7.9%	2.4%	1.6%	-1.6%	3.1%
All India	6.7%	-1.8%	1.4%	6.8%	3.8%	-1.2%	-0.4%	2.2%

Source: Citi Investment Research and Analysis

Figure 3. Total MoUs

Mins	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08
Circle A	465	493	476	470	501	502	503	502
Circle B	435	465	440	448	478	507	488	481
Circle C	455	435	446	469	496	513	505	522
Metro	468	489	491	483	506	505	511	497
All India	454	476	462	464	493	505	499	496

Source: Citi Investment Research and Analysis

Circle C ARPUs higher than B though gap is narrowing

Higher ARPU in Circle C compared to A/B category was a function of lower wireless penetration and access to fixed line. Wireless operators till ~2007 were preoccupied with expanding their market share in A and B circles resulting in higher ARPU compression in those circles as sub quality deteriorated. Lower wireless penetration in C circles meant that the subs were of higher quality (initial uptake is by the creamy layer) and hence higher usage and ARPU. However as the penetration in C circles increased over time, the gap has begun to narrow to the point where ARPUs are now at a discount to A circle and only at a slight premium to B circle.

Figure 4. GSM ARPU (Rs)

	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08
Circle A	343	322	306	294	295	274	249	264	240	225	225
Circle B	319	313	280	264	261	238	232	232	216	198	200
Circle C	374	342	326	295	307	282	269	266	234	212	204
Metro	406	400	393	372	369	353	346	333	296	275	270
All India	352	337	316	298	297	279	261	264	239	221	220
Premium to B circles	*17.2%*	*9.3%*	*16.4%*	*11.7%*	*17.6%*	*18.5%*	*15.9%*	*14.7%*	*8.3%*	*7.1%*	*2.0%*
Premium to A circles	*9.0%*	*6.2%*	*6.5%*	*0.3%*	*4.1%*	*2.9%*	*8.0%*	*0.8%*	*-2.5%*	*-5.8%*	*-9.3%*

Source: Citi Investment Research and Analysis

Figure 5. SMS Usage Has Begun to Pick Up After Declining in the Past

Per month	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08
Circle A	48	36	32	28	33	41
Circle B	18	18	18	14	15	16
Circle C	12	13	18	14	12	13
Metro	43	41	36	34	38	44
All India	32	28	26	22	25	29

Source: Citi Investment Research and Analysis

#2: Why dual network strategy is a compulsion for CDMA incumbents

Figure 6. ARPU Divergence Becoming More Stark

Rs	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08
GSM	352	337	316	298	297	275	261	264	239	221	220
CDMA	228	215	196	202	206	173	176	159	139	122	111
GSM premium to CDMA	54.4%	56.7%	61.2%	47.5%	44.2%	59.0%	48.3%	66.0%	71.9%	81.1%	98.2%

Source: Citi Investment Research and Analysis

While the quality gap between GSM and CDMA subscribers is well known, the differential has continued to grow steadily over time and now stands at ~100% i.e. the average GSM ARPU is Rs220 vs. Rs111 for CDMA subscriber. This wide KPI divergence shows that the dual network strategy is probably a compulsion for RCOM/Tata Tele.

#3: Fixed-line substitution more prevalent in rural areas

While there has been a consistent decline in the overall wireline subscriber base as a result of fixed-to-mobile substitution, the trend surprisingly has been faster in rural areas where the overall teledensity itself is very low as compared to urban areas. The key reasons for this trend include:

1. Success of Fixed Wireless (FWTs)
2. Innovative services (lifetime, micro pre-paid) in wireless also has a role to play providing more flexibility to subscribers compared to fixed line
3. Major portion of fixed-to-mobile substitution has already happened in the urban areas during the early part of the wireless telecom cycle
4. High proportion of corporate subs in urban areas which cannot be substituted for wireless

Figure 7. Fixed-to-Mobile Substitution More Prevalent in Rural Areas

Fixed Line Disconnections	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08
Urban QoQ decline	-0.7%	-2.0%	-0.4%	1.3%	-1.3%	-0.8%	-0.3%	1.0%	-0.7%	-1.1%	-0.3%
Rural QoQ decline	-0.5%	-1.7%	-0.6%	0.6%	-2.3%	-2.3%	-2.0%	-0.9%	-2.7%	-3.4%	-2.5%
Total QoQ decline	-0.6%	-1.9%	-0.4%	1.1%	-1.6%	-1.3%	-0.8%	0.4%	-1.3%	-1.7%	-0.9%

Source: Citi Investment Research and Analysis

#4: Proportion of on-net calls increases from metros to C circles

The percentage of on-net calls varies from 48% in metros to 70% in C circle. A key reason for this trend could be market share concentration. Circles where one operator has a dominant market share have a higher percentage of on-net calls versus circles where market shares are less concentrated. For example, the metros with an average of 25% market share for the largest operator have 48% of on-net calls versus 70% for circle C where the average market share for the largest operator is 36%.

Figure 8. Percentage of On-Net Calls Across Circles

	Mar-08	Jun-08	Sep-08	Dec-08
A category	47%	50%	52%	52%
B category	67%	60%	62%	62%
C category	61%	69%	70%	70%
Metro	60%	47%	48%	48%
All India	59%	56%	57%	57%

Source: Citi Investment Research and Analysis

Figure 9. Market Share of the Leading Operator Across Circles

	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
Metros						
Delhi	23.4%	23.3%	23.3%	23.1%	23.0%	22.8%
Mumbai	26.0%	25.6%	25.5%	25.4%	23.8%	23.7%
Chennai	27.7%	27.8%	26.6%	27.0%	27.1%	27.4%
Kolkata	25.1%	25.3%	25.2%	24.9%	25.0%	25.2%
Average MS in metros	**25.5%**	**25.5%**	**25.2%**	**25.1%**	**24.7%**	**24.8%**
Category A circles						
Maharashtra	25.1%	25.3%	25.4%	25.7%	25.7%	25.2%
Gujarat	35.2%	35.1%	35.1%	35.0%	33.8%	34.1%
AP	30.6%	30.8%	31.0%	31.0%	31.1%	30.6%
Karnataka	44.7%	44.9%	45.1%	45.0%	44.1%	44.0%
TN	28.5%	28.8%	29.6%	30.2%	30.3%	30.1%
Average MS in A circles	**32.8%**	**33.0%**	**33.2%**	**33.4%**	**33.0%**	**32.8%**
Category B circles						
Kerela	27.2%	27.2%	27.3%	27.5%	27.7%	28.0%
Punjab	28.2%	28.2%	28.3%	28.2%	27.6%	27.0%
Haryana	22.4%	23.0%	23.5%	23.7%	24.1%	23.5%
UP (W)	23.4%	23.4%	23.5%	23.7%	23.7%	23.3%
UP(E)	24.5%	24.9%	25.5%	25.5%	24.7%	24.9%
Rajasthan	32.0%	32.4%	32.6%	32.2%	31.1%	31.4%
MP	31.8%	31.9%	32.0%	32.0%	31.6%	31.1%
WB	30.4%	30.7%	30.7%	30.9%	31.1%	31.3%
Average MS in B circles	**27.5%**	**27.7%**	**27.9%**	**28.0%**	**27.7%**	**27.6%**
Category C circles						
HP	32.4%	32.3%	32.5%	32.3%	32.6%	32.1%
Bihar	40.0%	39.2%	39.3%	38.6%	37.7%	37.2%
Orissa	36.0%	35.8%	35.7%	35.9%	35.8%	35.9%
Assam	30.6%	30.9%	31.7%	30.7%	30.2%	29.8%
NE	32.0%	32.6%	32.9%	32.2%	32.2%	31.8%
J&K	49.8%	49.4%	50.1%	50.3%	49.9%	50.3%
Average MS in C circles	**36.8%**	**36.7%**	**37.0%**	**36.7%**	**36.4%**	**36.2%**

Source: Citi Investment Research and Analysis

Valuations & Risks

Bharti Airtel (BRTI.BO; Rs659.85; 1L)

Valuation

Our target price of Rs900 is based on Mar-09E core DCF of Rs730 and a towerco option value of Rs170. The DCF is based on a WACC of 12% to reflect current macro environment, a terminal growth rate of 4% and beta of 0.9. We prefer DCF as our primary valuation methodology because the wireless market will likely continue to see robust growth requiring upfront capex but should generate significant free cash beyond FY09-10E. Our target price (standalone ex-towerco) represents a FY10E P/E of 14.2x, P/CEPS of 9.4x and EV/EBITDA of 7.9x.

Risks

Our quantitative risk-rating system, which tracks 260-day share price volatility, rates Bharti shares as Low Risk. We are comfortable attributing a Low Risk rating for the following reasons: 1) Bharti has a track record of profitability and execution; 2) the company's capex plans are fully funded; and 3) SingTel's strategic shareholding leaves us comfortable with execution issues and initiatives. Risks that could prevent the stock from reaching our target price include competition-led tariff pressures, cut in termination fee, un-remunerative capex and excessive bidding for 3G.

Reliance Communications (RLCM.BO; Rs218.10; 3H)

Valuation

Our target price of Rs150 is based on a core business value of Rs108 and net towerco value accretion of Rs42. We usually value Indian wireless plays on DCF given the back-ended nature of profits and cash flow. For RCOM, however, we use EV/EBITDA. The core business value of Rs108 is based on 5.6x FY10E EV/EBITDA, a 30% discount to Bharti's implied target multiple (ex- towerco), the same as employed for Idea's target price computation. We believe the discount to Bharti is justified on account of the inherent risks of dual network, high hidden leverage, stretched FCF breakeven, and lack of clarity on accounting policies (especially related to finance income).

Risks

Our risk-rating system, which tracks 260-day share price volatility, assigns a High Risk rating to RCOM, which we believe is appropriate given its high hidden leverage in the context to the current credit crunch, prolonged FCF breakeven given high capex plans and a lack of clarity on certain accounting policies. Upside risks to our target price include higher-than-expected market share gains in GSM and visibility on tenancy of RTIL with possible move towards value monetization. Easing of the macro credit environment and slower conversion of current liabilities to real debt would positively impact the earnings and sentiment on the stock.

IDEA Cellular (IDEA.BO; Rs53.30; 2H)

Valuation

Our target price of Rs56 is based on a core business value at Rs38/share and a towerco option value of Rs18/share through its 16% stake in Indus. Idea's core business is valued at 5.5x FY10E EV/EBITDA, a 30% discount to Bharti's imputed target FY10E EV/EBITDA. We believe that the high discount to Bharti is justified given 1) Margin impact of new circle launches - higher than expected impact of new launches (Mumbai/Bihar) in the current quarter and prolonged EBITDA breakeven in the previous 3 launches raise concern on NAV accretion from the new circles; 2) Additional leverage required to fund capex over next 1-2 years in the context of the ongoing current credit crunch; and 3) 3G auction carries event risk in relation to Idea's relatively weaker balance sheet.

Risks

We assign a High Risk rating to IDEA Cellular shares. Several downside risks could impede the stock from reaching our target price, in our view. Operationally, risks facing Idea have increased given that it will need to incur higher capex in the new circles due to the coverage compulsions in the context of the ongoing current credit crunch. Besides, prolonged EBITDA breakeven in the new circles raises concerns on NAV accretion in the new launches. In addition the upcoming 3G auction carries an event risk of unduly straining the balance sheet (FY10E Net Debt/EBITDA already at 2.3x) in the event of aggressive bidding. Upside risks to our target price include higher-than-expected market share gains and faster EBITDA breakeven in new circles and moderate 3G bidding.

Appendix A-1

Analyst Certification

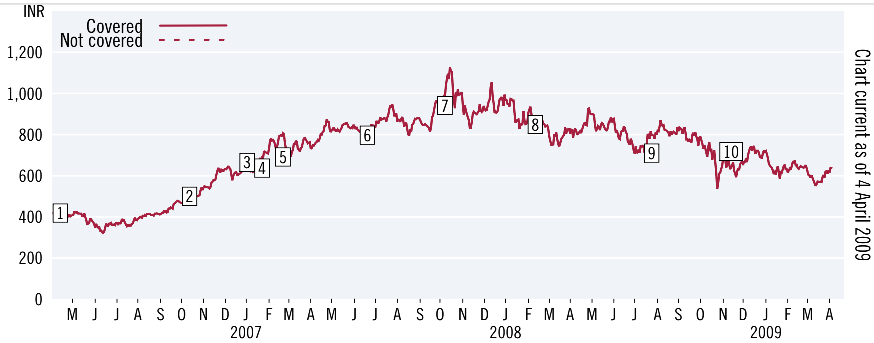
Each research analyst(s) principally responsible for the preparation and content of all or any identified portion of this research report hereby certifies that, with respect to each issuer or security or any identified portion of the report with respect to an issuer or security that the research analyst covers in this research report, all of the views expressed in this research report accurately reflect their personal views about those issuer(s) or securities. Each research analyst(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this research report.

IMPORTANT DISCLOSURES

Bharti Airtel (BRTI.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Rahul Singh
Covered since April 28 2006



Date	Rating	Target Price	Closing Price
1 13-Apr-06	1M	*500.00	395.95
2 12-Oct-06	*1L	*600.00	475.65
3 2-Jan-07	1L	*750.00	633.00
4 23-Jan-07	1L	*800.00	689.15
5 21-Feb-07	1L	*960.00	806.30
6 20-Jun-07	1L	*1,050.00	824.65
7 8-Oct-07	1L	*1,200.00	984.80
8 12-Feb-08	1L	*1,150.00	855.80
9 24-Jul-08	1L	*1,070.00	797.95
10 13-Nov-08	1L	*900.00	631.25

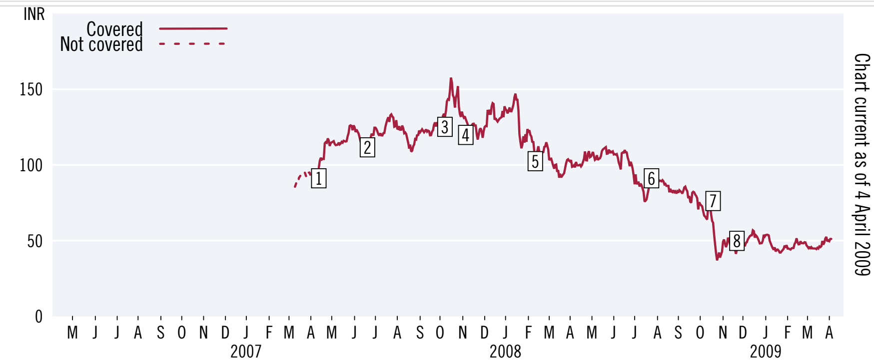
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

IDEA Cellular (IDEA.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Rahul Singh
Covered since April 12 2007



Date	Rating	Target Price	Closing Price
1 12-Apr-07	*1L	*112.00	98.15
2 20-Jun-07	1L	*140.00	115.15
3 8-Oct-07	1L	*155.00	131.80
4 6-Nov-07	*2L	*140.00	130.10
5 12-Feb-08	*1L	140.00	106.25
6 24-Jul-08	1L	*120.00	87.65
7 20-Oct-08	*2M	*70.00	61.80
8 21-Nov-08	*2H	*56.00	44.20

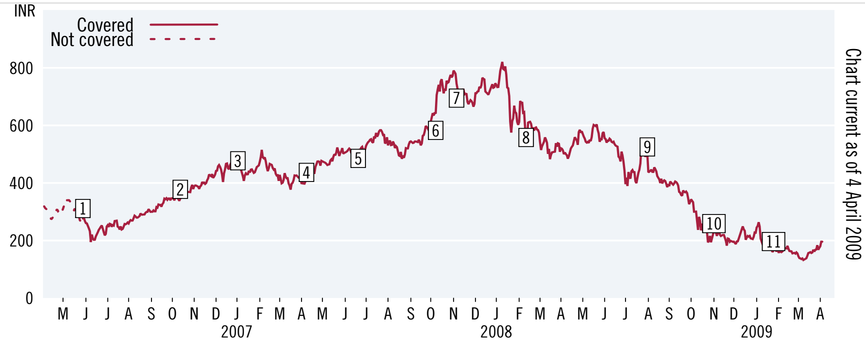
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Reliance Communications (RLCM.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Rahul Singh
Covered since May 30 2006



	Date	Rating	Target Price	Closing Price
1	29-May-06	*1M	*360.00	276.25
2	12-Oct-06	1M	*430.00	345.95
3	2-Jan-07	1M	*570.00	470.75
4	9-Apr-07	1M	*510.00	415.60
5	20-Jun-07	1M	*600.00	505.90
6	8-Oct-07	*1L	*750.00	640.90
7	6-Nov-07	*2L	*835.00	745.40
8	12-Feb-08	*1L	*760.00	575.70
9	31-Jul-08	*2L	*530.00	500.05
10	2-Nov-08	*2H	*270.00	220.70
11	26-Jan-09	*3H	*150.00	160.15

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Rahul Singh, Analyst, holds a long position in the securities of Bharti Airtel.

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% of companies in each rating category that are investment banking clients	47%	43%	36%

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Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.
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