

## ווזיזוו / וליזוו

## Company In-Depth

12 April 2007 | 32 pages

## IDEA Cellular (IDEA.BO)

### Initiate at Buy: Free from Shackles, Poised for Growth

- Initiate coverage at Buy/Low Risk Our DCF-based target price of Rs112 implies a target valuation of 11.6x FY09E EV/EBITDA in line with that of Bharti. We believe Idea's relatively undiluted exposure to India's wireless growth, its higher growth rates (FY07-09E EPS CAGR of 47.7%) and long-term M&A possibilities make it a better proxy for Bharti than is RCOM.
- Leverage to wireless growth restored Post its restructuring and IPO, Idea is placed to expand and deepen its network in what is essentially a supply-driven market (FY10E penetration of 32.8%). Roll-outs in three new circles have done well; two more rollouts are due based on spectrum. Margins will soften with new rollouts, but recover gradually to generate FY07-09E EBITDA CAGR of 42.6%.
- Strong regional player Idea Cellular has a national market share of 8.7% (Feb-07). More importantly, its strong presence in the eight old circles with 18.2% share and top-three ranking in six of them indicate inherent strengths. Besides, respectable key performance indicators (KPIs), which imply rational competitive behaviour, provide a boost to our confidence in Idea's ability to achieve NAV accretion from new rollouts.
- Key risks Delays in procuring spectrum impacting the rollout timetable and project cost overruns remain the key risks. From an industry perspective, we believe low revenue yields and moderate EBITDA margins leave little room for disruptive pricing.

Buy/Low Risk	1L
Price (10 Apr 07)	Rs94.90
Target price	Rs112.00
Expected share price return	18.0%
Expected dividend yield	0.0%
Expected total return	18.0%
Market Cap	Rs246,062M
	US\$5,765M

Price Perfo	rmance (	RIC: IDEA.B	O, BB: IDE	A IN)
INR				
93				٨
92				- []
91				
90				
89				
88				
87				.1
	30 Jun	29 Sep	29 Dec	30 Mar

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

Figure 1. St	atistical	abstract
--------------	-----------	----------

Year to	EBITDA	Net Profit	FD EPS	EPS Growth	P/E	EV/EBITDA	Price/CEPS
31 Mar	(Rs m)	(Rs m)	(Rs)	(%)	(x)	(x)	(x)
2005P	8,210	760	0.1	NA	NA	NA	NA
2006P	10,674	2,118	0.7	637%	NA	NA	NA
2007E	14,635	4.229	1.6	119%	58.3	18.7	22.2
2008E	21,873	6,631	2.5	54%	37.8	13.3	14.3
2009E	29,762	9,379	3.6	41%	26.7	10.1	10.6

Source: Citigroup Investment Research estimates

#### Rahul Singh<sup>1</sup>

+91-22-6631-9863 rahul.r.singh@citigroup.com

Gaurav Malhotra<sup>1</sup>

gaurav4.malhotra@citigroup.com

#### Anand Ramachandran, CFA<sup>2</sup>

+852-2501-2448

anand.ramachandran@citigroup.com

Citigroup Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD.

<sup>&</sup>lt;sup>1</sup>Citigroup Global Market India Private Limited; <sup>2</sup>Citigroup Global Markets Asia

Fiscal year end 31-Mar	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	nm	127.7	58.3	37.8	26.7
EV/EBITDA adjusted (x)	34.1	26.7	19.0	12.8	9.8
P/BV (x)	49.0	33.0	6.9	5.5	4.6
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (Rs)					
	0.10	0.74	1.63	2.52	3.56
EPS adjusted					
EPS reported	0.10 1.94	0.74	1.63	2.52	3.56
BVPS DPS	0.00	2.88 0.00	13.78 0.00	17.29 0.00	20.84
	0.00	0.00	0.00	0.00	0.00
Profit & Loss (RsM)	00.550	00.055	40.070	CE 004	04.550
Net sales	22,558	29,655	43,379	65,284	84,558
Operating expenses	-18,774	-24,476	-35,602	-54,257	-69,011
EBIT	3,784	5,179	7,778	11,026	15,547
Net interest expense	-3,189	-3,225	-3,979	-4,730	-5,165
Non-operating/exceptionals	171	244	495	540	180
Pre-tax profit	766	2,198	4,294	6,836	10,562
Tax	0	-80	-64	-205	-1,183
Extraord./Min.Int./Pref.div.	-538	-435	0	0	0
Reported net income	228	1,683	4,229	6,631	9,379
Adjusted earnings	228	1,683	4,229	6,631	9,379
Adjusted EBITDA	8,210	10,674	14,635	21,873	29,762
Growth Rates (%)					
Sales	74.0	31.5	46.3	50.5	29.5
EBIT adjusted	760.1	36.9	50.2	41.8	41.0
EBITDA adjusted	118.6	30.0	37.1	49.5	36.1
EPS adjusted	107.9	636.7	119.0	54.3	41.4
Cash Flow (RsM)					
Operating cash flow	19,912	22,418	30,463	41,520	48,223
Depreciation/amortization	4,427	5,495	6,857	10,847	14,215
Net working capital	784	4,505	6,705	3,498	-2,652
Investing cash flow	-9,195	-7,188	-32,966	-35,692	-29,378
Capital expenditure	-16,068	-7,188	-32,966	-35,692	-29,378
Acquisitions/disposals	7,322	0	0	0	0
Financing cash flow	13,223	-4,083	12,889	1,103	9,585
Borrowings	13,223	-4,083	9,555	678	9,585
Dividends paid	0	0	0,000	0	0,000
Change in cash	23,940	11,147	10,385	6,931	28,431
Balance Sheet (RsM)					
Total assets	53,310	56,547	98,604	113,860	131,096
Cash & cash equivalent	1,772	1,493	15,000	3,000	3,000
Accounts receivable	1,514	1,308	1,810	2,256	2,516
Net fixed assets	25,125	28,835	54,901	82,046	99,509
Total liabilities	44,092	<b>45,211</b>	62,868	68,305	76,163
Accounts payable	4,169	8,693	15,306	18,421	15,264
Total Debt	36,939	32,856	42,411	43,090	52,675
Shareholders' funds	9,218	11,336	35,735	<b>45,554</b>	54,933
Profitability/Solvency Ratios (%)			•	·	
EBITDA margin adjusted	36.4	36.0	33.7	33.5	35.2
ROE adjusted	5.7	30.9	20.0	16.3	18.7
ROIC adjusted	10.1	11.7	14.5	14.5	15.1
Net debt to equity	381.5	276.7	76.7	88.0	90.4
Total debt to capital	80.0	74.3	54.3	48.6	49.0
rotal dept to Capital	00.0	74.3	54.5	40.0	49.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791



## Contents

Valuation Analysis	4
DCF based target of Rs112	4
Idea's EV/EBITDA at par with Bharti, but multiple factors to support it	5
Idea in FY08/09 - Regaining the lost ground	7
Evolution of Idea	7
What has changed now?	7
Current operations displays inherent strengths	8
Strong Player in the existing circles	9
Restoring the lost ground since 2HFY07	10
KPIs compare well with peers	12
Industry Overview and Outlook	13
Indian Wireless — Strong tailwinds	13
Wireless Penetration Forecasts	13
ARPU curve to reflect affordability, price elasticity to be restrained	15
Financial Overview	16
Key assumptions	16
Leverage under control	20
Financial Summary Tables	22
Company Description	24
Investment Thesis	24
Risks	24
Appendix A-1	29
Analyst Certification	29

## **Valuation Analysis**

### DCF-based target price of Rs112

We set our 12-month price target for Idea Cellular at Rs112 per share giving a total return of 18% based on Mar 08E DCF. We believe this is an appropriate method due to the back-ended nature of free cash flows, especially in the context of new circle roll outs. We use a WACC of 10.8% at a target debt to total capital of 50.0% along with long-term terminal growth rate of 4.0% (similar to Bharti). Our DCF is based on explicit forecasts of FY07-16E with a terminal year EBITDA margins at 37.1% (~200bps below Bharti) and capex/sales of ~10% (in line with Bharti).

Rs m	Mar-07E	Mar-08E	Mar-09E	Mar-10E	Mar-11E	Mar-12E	Mar-13E	Mar-14E	Mar-15E	Mar-16E
Oper. EBIT	7,778	11,026	15,547	19,507	23,395	26,607	29,444	31,796	33,695	35,230
(Less) Taxes	(64)	(205)	(1,183)	(1,615)	(2,129)	(2,627)	(3, 132)	(8,718)	(10,894)	(12,077)
Net int. income/(exp)	(3,484)	(4,190)	(4,985)	(5,086)	(4,382)	(3,155)	(1,476)	494	2,619	5,025
Marginal Tax Rate	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%
Tax shield adjustments	(1,171)	(1,408)	(1,675)	(1,709)	(1,472)	(1,060)	(496)	166	880	1,688
NOPAT	6,543	9,413	12,689	16,183	19,793	22,920	25,815	23,243	23,681	24,842
(Add) Depreciation	5,814	9,697	13,065	15,819	18,241	20,556	22,755	24,838	26,786	28,583
(Add) Amortisation	1,044	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
(Less) Capex	(30,611)	(36,842)	(30,528)	(24,558)	(23,875)	(22,431)	(21,541)	(20,111)	(18,853)	(17,098)
(Less) Investments	-	-	-	-	-	-	-	-	-	-
(Less) Working Capital	6,705	3,498	(2,652)	(2,485)	(277)	(822)	(110)	(438)	(400)	(793)
Other adjustments	-	-	-	-	-	-	-	-	-	-
Free Cash Flows	(10,506)	(13,084)	(6,275)	6,109	15,033	21,374	28,069	28,682	32,364	36,684

Terminal Growth Rate	4.0%
WACC	10.8%
NPV (explicit FCF)	88,768
NPV of terminal value	246,655
Firm value	335,423
Net debt/cash	40,090
Equity value	295,333
No. of shares	2,635
Equity value per share	112

Source: Citigroup Investment Research estimates

#### Figure 3. WACC Estimation

Risk-free rate (%) - (Rf)	8.0%
Equity risk premium (%) (Rp)	8.0%
Beta (B)	1.0
Cost of equity	16.0%
Cost of debt	8.5%
Marginal tax rate (%)	34.0%
Target Debt to total capital (%)	50.0%
Long Run Nominal Growth rate (g) (%)	4.0%
WACC	10.8%

Source: Citigroup Investment Research

#### Figure 4. Valuation Sensitivities

WACC/g	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
9.3%	124	133	143	155	170	188	211
9.8%	113	120	128	138	150	164	182
10.3%	103	109	116	124	134	145	159
10.8%	94	99	105	112	120	129	140
11.3%	86	91	96	102	108	116	125
11.8%	80	83	88	93	98	105	112
12.3%	73	77	81	85	90	95	101

Source: Citigroup Investment Research

#### Idea's EV/EBITDA at par with Bharti, but multiple factors to support it

Idea trades at a 6.5% discount to Bharti on FY09E EV/EBITDA. Our DCF based target of Rs112 equates to an EV/EBITDA of 11.6x, a slight premium to Bharti's target multiples (for the ex-towerco portion of Rs800). Though Bharti's scale and well established management track record warrant a premium, we believe the following factors will support Idea's valuations:

- 1. Higher EBITDA growth rates for Idea for FY07-09E (800bps over Bharti) partly on account of the low base due to the under-investment in FY06 and 1HFY07.
- 2. Liquidity overflow from the best-in-class Bharti (due to constraints imposed by the foreign limit) should benefit Idea.
- Meanwhile, restoration of Idea's leverage to India's wireless growth and constraints faced by peers (RCOM's impending GSM overlay), makes the stock a preferred alternative.
- 4. Though the Aditya Birla Group has ruled out any potential M&A transaction in the immediate future, we believe that M&A potential exists in the long run, especially as spectrum constraints hinder the new entrants in GSM (Maxis, RCOM, Telekom Malaysia). A significant block (~30%) of private equity investors with a lock-in of one year, will also keep potential suitors interested.
  - a. RCOM, post its unsuccessful bid for Hutch-Essar, could be interested in Idea as it provides near-perfect fit for RCOM's present GSM presence.
  - b. Vodafone's stated target of 20-25% market share (from ~16%) appears steep and may have to involve inorganic options.
  - c. Idea's footprint also provides good fit for Maxis.

Figure 5. Peer Valuation Comparison (At current prices)

	EV/E	BITDA (x)	PER (x)		DA (x) PER (x) P/CEPS (x)		EPS (x)	EBITDA CAGR (FY07-09E) (I	EPS CAGR FY07-09E)
	2008E	2009E	2008E	2009E	2008E	2009E			
ldea	13.3x	10.1x	37.8x	26.7x	14.3x	10.6x	42.6%	47.7%	
Bharti	13.5x	10.8x	23.9x	19.7x	15.1x	12.3x	34.6%	32.8%	
RCOM	10.4x	7.9x	18.9x	14.4x	10.9x	8.4x	37.4%	39.0%	

Source: Citigroup Investment Research estimates

#### Figure 6. Peer Valuation Comparison (At target prices)

	EV/EBI1	TDA (x)	PER	(x)	P/CEP	S (x)	(FY07-09E)	(FY07-09E)
	2008E	2009E	2008E	2009E	2008E	2009E		
Idea	15.3x	11.6x	44.5x	31.5x	16.9x	12.5x	42.6%	47.7%
Bharti <sup>1</sup>	14.2x	11.3x	25.1x	20.8x	15.9x	12.9x	34.6%	32.8%
RCOM	12.7x	9.7x	23.2x	17.7x	13.4x	10.4x	37.4%	39.0%

<sup>&</sup>lt;sup>1</sup> TP of Rs.800 ex-Towerco

Source: Citigroup Investment Research estimates

## Idea in FY08/09 - Regaining Lost Ground

#### **Evolution of Idea**

Originally a joint venture between the Aditya Birla group and A&T (presence through Birla Communications), the shareholding structure has undergone a significant change since it commenced operations in 1995

#### Figure 7. Flashback

#### 1995

Commenced operations as a joint venture between the Birla Group and AT&T (presence through Birla Communications) in Maharashtra and Gujarat Circles

#### 2000

Merger of Birla A&T Communications and Tata Cellular (operatins in Andhra Pradesh circle)

#### 2001

Renamed Birla Tata AT&T (BATA Ltd) with each promoter owning and equal 33% stake, Acquired RPG Cellular (operating in Madhya Pradesh)

#### 2002

Rebranded "Idea Cellular" Launched operations in Delhi as fourth Cellular operator

#### 2004

Acquired Escotel - incumbent operator in Haryana, UP(W) and Kerela and license holder for Rajasthan, HP and UP(E)

#### 2005

AT&T exits Idea Cellular. Birlas and Tata's pick up the AT&T stake

**2006** Tata's exit Idea Cellular by selling their 48% stake to the A V Birla Group for a consideration of Rs44bn. The Birlas offloaded 33% to Private Equity Investors in the second half of 2006. The Birlas held 65.1% stake post the restructuring.

#### 2007

Idea listed in March raising INR25bn for funding capex and redemption of preference shares.

Source: Citigroup Investment Research

## What has changed now?

#### Strong and single local promoter in charge now

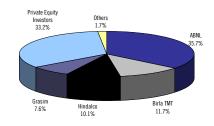
After years of restructuring and lack of clarity among the various promoter groups, Idea Cellular is finally under one single promoter – the A.V. Birla Group, from 2006 onwards post the sale of Tata's 48% stake in Idea Cellular to the A.V. Birla Group. The A.V. Birla Group held a 65.1% stake post this final round of restructuring. With this restructuring, Idea Cellular joined the other major India telcos such as Tata Tele, Bharti and Reliance, which are backed by a financially strong promoter.

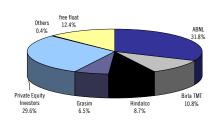
Post the management control shifting to the Birlas and reduced uncertainty among the shareholders, the focus has increased on: 1) improving coverage in existing eight circles where peers had moved ahead, 2) implementing rollout in three new circles, i.e. H.P., UP(E) and Rajasthan in FY07, and 3) rollout in Mumbai and Bihar in 2HFY08 post spectrum allocation.

Besides, a single promoter now enables greater flexibility in decision making, especially with respect to rollout strategies, new circle acquisitions and more dynamic capex budgeting. We therefore believe that the benefits of the change in its corporate structure suit the requirement of the Indian wireless industry.

Figure 8. Shareholding Pattern (Post restructuring)

Figure 9. Shareholding Pattern (Post IPO)





Source: Company Reports, Citigroup Investment Research Source: Company reports, Citigroup Investment Research

#### Idea's public listing

Post the last round of restructuring, which brought the emergence of one dominant promoter – A.V. Birla Group – Idea Cellular listed on the Indian bourses in March 2007 at an issue price of Rs75 per share with the promoters diluting 7.4% stake. It raised Rs25bn to fund its capex programme, with part of the proceeds already used for redemption of preference shares (Rs7.6bn including accumulated dividend).

## **Current Operations Display Inherent Strengths**

Idea Cellular is the fifth largest wireless operator in India. The Idea network runs on the GSM platform and operates in about 3,031 towns (census and noncensus) in 11 circles in India. It has a subscriber base of about 13.6m subscribers as of Feb 2007 and an overall market share of 8.7% (18.2% in the 8 circles of active operation, i.e. excluding UP(E), Rajasthan and HP) behind Bharti, RCVL, BSNL and Hutch. Idea has a strong presence in its eight active circles in terms of operational coverage and market position. It has a total highway connectivity of about 24,000kms with 8,600 cell sites. It also has 142,440 retail outlets across the country, 36 Mobile Switching Centres (MSC's) and 128 Base Station Controllers (BSC's). Its network strategy in the existing circles follows a cluster approach, whereby it penetrates deeper in the existing circles and then expands coverage to render its network competitive.

Idea operates at 6.2Mhz spectrum capacity in Gujarat, Maharashtra and Haryana, at 8MHz in AP, Delhi and MP, 9.8MHz in UP(W) and 4.4MHz in Kerala. Further in the circles where it rolled out services in FY07, it has 6.2MHz in HP and Rajasthan and 8MHz in UP(E).

Figure 10. Spectrum Capacity

Source: Company Reports

Established circles	900 MHz	1800 MHz	Total
AP	6.2	1.8	8.0
Delhi	-	8.0	8.0
Gujarat	6.2	-	6.2
Haryana	6.2	-	6.2
Kerala	-	4.4	4.4
MP	6.2	1.8	8.0
Maharashtra	6.2	-	6.2
UP(W)	7.8	2.0	9.8
New circles			
HP	-	6.2	6.2
Rajasthan	-	6.2	6.2
UP(E)	6.2	1.8	8.0

Idea has applied for licenses in 11 circles, including Mumbai, Bihar, Orissa, Karnataka, Tamil Nadu, Punjab and Chennai. Out of this, the company has already paid the entry fee and activated the licence for Mumbai and Bihar. The selection of new circles is based on penetration levels, ease of roll-out, entry fee, and ability to acquire spectrum. Idea has already rolled out its network for the existing licenses in Rajasthan, UP(E) and HP (owned by Escotel earlier). While the next priority will be Mumbai and Bihar, which are expected to launch in the second half of FY08, timing will be contingent on the delayed spectrum allocation.

It has also applied for an NLD licence and has received the Letter of Intent (LoI). The company is toying with various options, however, which range between: 1) leasing capacity for carrying non-captive wholesale traffic, and 2) only carrying on-net traffic. The company is likely to take a decision on this only after evaluating the cost-benefit analysis vis-à-vis the wholesale carriage rates offered by the present NLD operators, which have come down substantially.

#### Strong player in existing circles

Idea is a market leader in the Maharashtra and UP (W) and ranks among the top-three operators in six of the 11 circles where it operates. This is helped in part on account of it being the incumbent operator in seven circles. The only circle, where, despite being an incumbent operator, Idea is not among the top-three players is AP, where its market share of 14.0% is lower than that of Bharti (27.7%), RCOM (22.7%) and BSNL (14.2%).

Figure 11. Circle Wise Market Share

	ldea	Bharti	BSNL <sup>1</sup>	Reliance	Hutch	Tata Tele	<b>Others</b>	Total
Top player in the circle								
Maharashtra	24.3%	21.0%	17.5%	19.9%	9.4%	7.9%		100%
U.P.(W)	20.8%	13.0%	17.0%	19.6%	20.8%	8.8%		100%
Among top 2 players in the circle								
M.P.	22.2%	19.2%	16.8%	36.8%	0.0%	5.1%		100%
Haryana	20.2%	17.6%	21.1%	12.5%	17.3%	11.2%		100%
Among top 3 players in the circle								
Gujarat	16.0%	14.8%	9.6%	17.6%	37.5%	4.4%		100%
Kerala	21.1%	13.4%	27.0%	21.6%	11.7%	5.3%		100%
Rest of the circles in which Idea opera	ites							
A.P.	14.0%	27.7%	14.2%	22.7%	11.6%	9.7%		100%
Delhi	12.2%	25.8%	11.3%	17.6%	19.6%	13.5%		100%
H.P.	1.1%	39.0%	34.1%	19.6%	0.0%	5.9%	0.3%	100%
U.P.(E)	3.2%	15.2%	27.6%	21.1%	27.3%	5.6%		100%
Rajasthan	3.3%	24.6%	24.1%	18.2%	19.6%	9.7%	0.5%	100%
Total market share <sup>2</sup>	15.2%	20.2%	18.0%	20.7%	17.7%	8.1%	0.0%	100%

<sup>&</sup>lt;sup>1</sup> Includes MTNL

#### Retaking the ground it lost since 2HFY07

Post the clarity on shareholding structure and with a single promoter at the helm, Idea has refocused its energies on the eight existing circles first. The market share/net adds in the eight circles lagged in the past, mainly due to the lack of adequate coverage capex, even as the peers surged ahead. This lower infrastructure spend prior to the restructuring resulted in Idea Cellular leaking its market share in some of the circles to its competitors (See figure 12).

Figure 12. Historical Capex Comparison

		Capex to sales (%)	
Year ended March 31,	2004	2005	2006
ldea Cellular	39.9%	67.2%	27.2%
Bharti Airtel <sup>1</sup>	51.6%	54.7%	53.3%

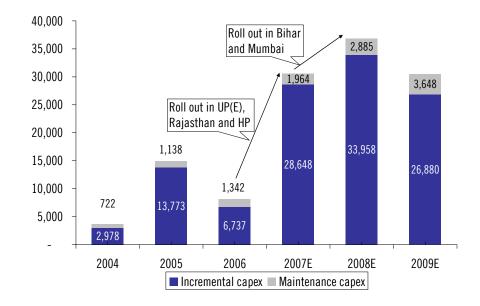
<sup>1</sup> Mobile capex only

Source: Citigroup Investment Research, Company Reports

However, recent months brought a strong resurgence as Idea has stepped up capex in the existing circles to plug the coverage gap between itself and the other players viz. Bharti, Hutch and BSNL. This is quite evident in the sustained increase in Idea's net subscriber additions (Figure 14). Idea rolled out services in three new circles in FY07, i.e. UP(E), Rajasthan and H.P. It expects to roll out services in the Mumbai and Bihar circles by the second half of 2008 once spectrum becomes available. It expects to incur capex of Rs12bn over FY08 and FY09 for its roll out plans in these two new circles.

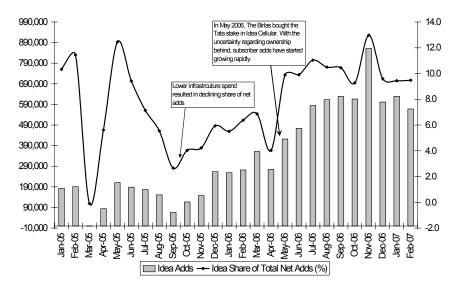
<sup>&</sup>lt;sup>2</sup> Market share in the circles where Idea operates Source: Citigroup Investment Research, COAI, AUSPI

Figure 13. Capex Build-up...



Source: Citigroup Investment Research, Company Reports

Figure 14. ... Resulting in Improvement in Idea's Share of Net Adds in the Past 10 Months



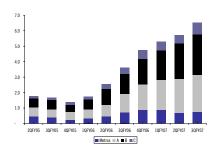
Source: COAI, AUSPI, Citigroup Investment Research

#### KPIs compare well with peers

Idea's key performance indicators (MOU, ARPU and EBITDA margins) compare well with those of its peers. This indicates Idea's ability to execute well, despite the scale shortcomings vis-à-vis the nationwide players. Besides, it has achieved its strong market share position without compromising on tariffs (rev/min). Please note, however, that Idea's pre-paid ARPUs are calculated without amortizing the lifetime rentals (which is amortized over 18 months for Bharti and 46-65 months for RCVL). This explains the increase in Idea's pre-paid ARPUs during 2HFY06, when lifetime rentals made a significant contribution. This also explains the jump in EBITDA margins.

Blended ARPU (Rs)	Jun-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06
Bharti	491	476	470	442	441	438
Hutch Essar	554	518	511	454	433	420
Reliance	403	421	413	379	379	354
ldea	416	375	397	381	362	335
Blended MOU (min)						
Bharti	383	388	411	431	441	451
Hutch Essar	351	369	385	378	392	406
Reliance	501	568	547	532	491	461
ldea	280	282	290	302	342	344
ARPM (Rs/Min)						
Bharti	1.31	1.25	1.17	1.04	1.01	0.98
Hutch Essar	1.58	1.40	1.33	1.20	1.10	1.03
Reliance	0.80	0.74	0.76	0.71	0.77	0.77
ldea	1.49	1.33	1.37	1.26	1.06	0.97
EBITDA Margins %						
Bharti	34.8	36.5	36.5	36.2	36.4	36.9
Hutch Essar	33.6	NA	31.3	NA	32.7	N/
Reliance	22.7	28.2	32.1	35.7	36.0	36.1
ldea	NA	34.0	35.5	39.1	33.6	35.1

#### Figure 16. Subscriber Adds by Category (m)



Source: Citigroup Investment Research

## **Industry Overview and Outlook**

India remains among our favorite markets. We recently raised our growth forecasts to reflect a record-setting pace that we believe is achievable. Our subscriber estimates stand at 239m for March-08 and 388m for March-10. We are firmly convinced that a combination of increased coverage helped in part by infrastructure sharing, lower cost handsets, innovative pricing and regulatory cost cuts will drive Indian wireless subscriber growth consistently higher – we expect ~50% wireless penetration by 2016.

#### Indian wireless — strong tailwinds

Source: Citigroup Investment Research estimates

We expect 239m subscribers by March 2008 and 388m by March 2010. While higher peak in net adds in recent months confirms the trend, our forecasts are based on the continued strong tailwinds in the form of unprecedented coverage expansion, lower price handsets (esp. in GSM), rising affordability and affordable tariffs.

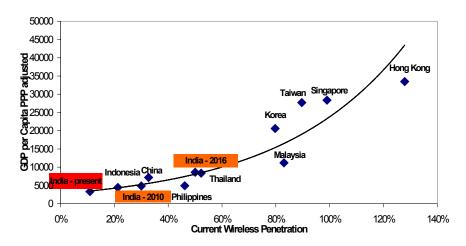
Figure 17. Subscriber Estimate	es				
	FY07E	FY08E	FY09E	FY10E	FY16E
Subscriber Estimates ('000)	162,230	239,186	313,894	387,693	664,128
Population (Million)	1,130	1,147	1,164	1,182	1,292
Penetration (%)	14.4%	20.9%	27.0%	32.8%	51.4%

	FY06	FY07E	FY08E	FY09E
Total Fixed	56,409	61,472	64,194	67,114
Wireline	49,795	50,710	49,358	48,202
Fixed Wireless	6,614	10,763	14,837	18,912
Total Wireless	91,993	162,230	239,186	313,894
GSM	69,194	121,234	180,328	237,513
CDMA	22,800	40,997	58,858	76,381
Total Subs (000)	148,402	223,703	303,381	381,009
Population	1,113	1,130	1,147	1,164
Growth (%)	1.5%	1.5%	1.5%	1.5%
Mobile penetration (%)	8.3	14.4	20.9	27.0
Fixed penetration (%)	5.1	5.4	5.6	5.8
Total teledensity (%)	13.3	19.8	26.4	32.7

#### **Wireless Penetration Forecasts**

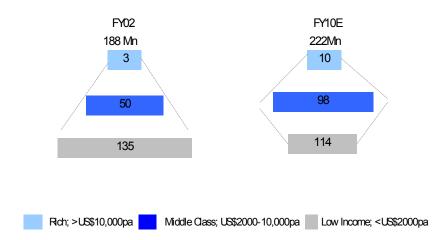
India's wireless penetration is the lowest in the region, in line with the country's per capita income (see chart below). But that is changing dramatically with the rise in nominal income levels; India's penetration is likely to reach ~30% in 2010 and 50% in 2016 if one simplistically follows the best-fit curve that explains the correlation between teledensity and per capita income.

Figure 19. Wireless Penetration in Sync with Per Capita GDP (US\$/annum)



Source: Citigroup Investment Research

Figure 20. India's Income Distribution (Number of Households in Millions)



Source: NCAER, Citigroup Investment Research

Besides the empirical evidence, our renewed confidence in India's growth potential stems from two factors:

Affordability — Lowest tariffs in the world (revenue yields at 2cents/min)
and innovative offerings (which match up to the best in the industry) offset
some of the disadvantages of low per capita incomes. In fact, MOUs have
remained high and ARPUs have not fallen that sharply either, indicating
that the Indian subscriber's affordability may have been underestimated
earlier.

Coverage — With only 50% of the population covered and all operators
pursuing a scorching rate of geographical expansion, we believe that
coverage itself could continue to drive net adds over the next 18-24 months.
This is evident in the wide difference between penetrations in various
circles in which Idea is present.

Figure 21. Penetration in Idea's 11 licenses Reflects Significant Potential

Source: Citigroup Investment Research, COAI, AUSPI

H.P.

Kerala

20%

0%

Delhi

#### ARPU curve to reflect affordability, price elasticity to be restrained

Haryana

A.P. M

Gujarat

Maharashtra Rajasthan

Increasing penetration is, however, likely to come at lower ARPUs. Though ARPUs have remained relatively resilient on account of the spurt in usage levels in the recent past, we believe that price elasticity of usage will wear off eventually. Average MOUs and hence ARPUs will, therefore, decline (especially in the pre-paid segment) as wireless penetration deepens to accommodate customers with less disposable income.

U.P.(W)

M.P.

U.P.(E)

## **Financial Overview**

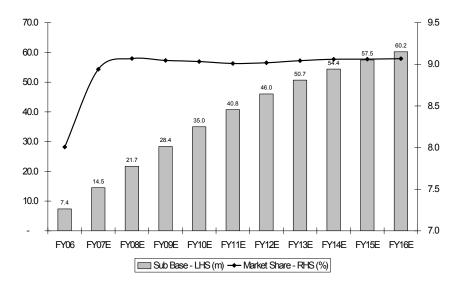
Our financial forecasts for FY07-09E incorporate the rollouts on three licenses (UP-East, Rajasthan and HP) in the current fiscal year and proposed rollouts in Mumbai and Bihar in 2HFY08. While the company also proposes an NLD rollout, its commitment in terms of entry fee (Rs25m) and rollout capex will likely remain manageable as the company is likely to follow a mix of "make" and "buy" strategies.

#### **Key assumptions**

#### **Market Share**

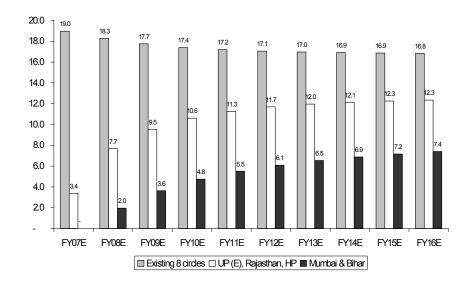
We believe that Idea's overall market share will stabilize at around 9% (including incremental market share in five new circles). However, we conservatively assume a lower market share for the three new circles, which were launched in FY07 (UP-East, Rajasthan and HP) and the proposed two new circles (Mumbai & Bihar). The market share assumption for the new circles is in line with Idea's performance in Delhi, where it was a relatively late entrant as a fourth operator. The strong presence of incumbents (esp. in Mumbai) and potential entry of new players (Maxis, RCOM GSM) will also play a role in determining the extent of Idea's gains.

Figure 22. Idea's Subscriber Forecasts



Source: COAI, AUSPI, Citigroup Investment Research estimates

Figure 23. Idea's Market Share – Existing, New and Proposed Circles (%)

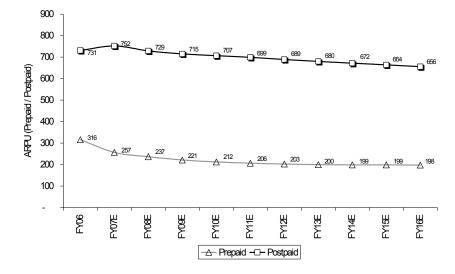


Source: Citigroup Investment Research

#### ARPU and revenue per min

We forecast Idea's ARPU to decline from about Rs390 (US\$9) in FY06 to about Rs300 (US\$6.5) in FY08E and Rs250 (US\$5.5) in 2016E. Increasing penetration would obviously come at lower ARPUs. Though ARPUs have remained remarkably resilient on account of a spurt in usage levels, we believe that price elasticity of usage will wear off eventually as tariff declines moderate from hereon. MOUs and hence ARPUs will, therefore, decline (esp. in pre-paid segment) as wireless penetration deepens.

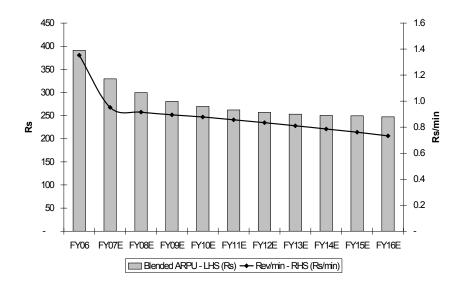
Figure 24. ARPU Trends (Rs.)



Source: Company Reports, Citigroup Investment Research estimates

We expect the revenue per min (ARPU divided by MOU) to decline from about Rs1.0 to Rs0.73 by 2016. Competitive equilibrium and likely rational pricing strategies from new entrants will ensure that declines in revenue yields will moderate compared with previous levels. Also, the improving outgoing/incoming mix and growing contribution from mobile value added services (VAS) should cushion the decline in revenue per min. This trend is evident in the recent KPIs of Bharti and will also likely kick in for Idea going forward.

Figure 25. Revenue Yields and Blended ARPU

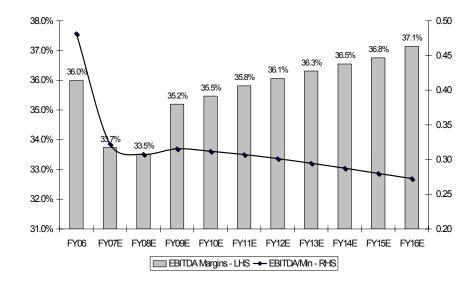


Source: Company Reports, Citigroup Investment Research estimates

## **EBITDA** margins

We expect pressure on Idea's EBITDA margins during FY07-08E on account of the new rollout of the five new circles. Upfronting of fixed costs and inevitable gradual ramp-up in revenues will mean EBITDA breakeven could take 12-15 months in the new circles. We expect Idea to achieve a stable state EBITDA of 36-37%, about 200bps lower than its larger peer, Bharti.

Figure 26. EBITDA - % of Revenue and Rs/min

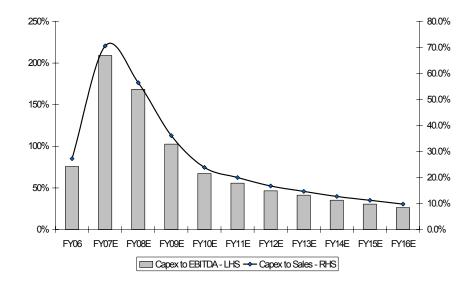


Source: Company Reports, Citigroup Investment Research estimates

#### Capital expenditure — catch up + new rollouts

Capital expenditure for FY07-08E will be on the higher side (compared to EBITDA and sales) due to the new rollouts – including ~Rs12bn for Mumbai and Bihar to be incurred during FY08-09E. Idea is likely to get spectrum in the 1800MHz frequency from the Wireless Planning & Coordination (WPC) wing of the DoT, which would entail higher capex spending as compared to if it were to roll out services using the 900 MHz frequency. Terminal Capex/sales of 10% (FY16E) and Capex/EBITDA of 26%, are, however, in line with the rest of the industry.

Figure 27. Capital Expenditure Assumptions

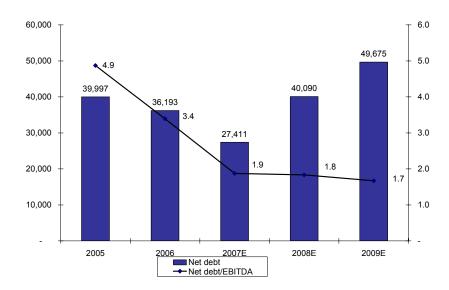


Source: Citigroup Investment Research, Company Reports estimates

#### Leverage under control

Despite the IPO funding, Idea will require additional debt to fund its capex in FY08-09. However, its net debt/EBITDA will come down to manageable levels of ~1.8x in FY08E. We factor in a greenshoe option (42.5m shares) which was recently exercised by the company, leading to an increase in equity capital to Rs26,354m and the consequent increase in share premium.

Figure 28. Leverage Under Control Post IPO (Rs m)



Source: Company Reports, Citigroup Investment Research estimates

# http://deadpresident.blogspot.com Key assumptions - Comparison with peers

To summarise our key assumptions for FY07-09E, we compare our forecasts for Idea with its peers that we have under coverage – Bharti, RCOM, Hutch-Essar. Our assumptions for Idea reflect its stage of rollout, and its strengths & weaknesses vis-à-vis the integrated and larger players. The key difference is Idea's EBITDA margin, which will be constrained in FY07E-08E due to new circle rollouts.

	FY05/CY04	FY06/CY05	FY07/CY06E	FY08/CY07E	FY09/CY08
Subs (M)	1103/0104	1100/0103	1107/01002	1100/010/2	1103/01001
Bharti	11.0	19.6	37.1	55.0	70.8
Hutch-Essar	-	11.4	23.4	37.0	49.7
RCOM	10.4	16.7	29.1	44.0	58.7
Idea	5.1	7.4	14.5	21.7	28.4
Blended ARPU (Rs)					
Bharti	498	441	425	375	342
Hutch-Essar	-	522	425	364	329
RCOM	NA	435	391	354	310
Idea	419	395	329	300	281
EBITDA % - wireless					
Bharti	34.2%	36.1%	36.5%	38.3%	38.9%
Hutch-Essar	0.0%	32.4%	33.0%	35.0%	36.5%
RCOM	NA	30.3%	36.9%	37.1%	38.4%
Idea	36.4%	36.0%	33.7%	33.5%	35.2%
Wireless Capex (INR M)					
Bharti	28,952	43,048	75,504	81,273	70,48
Hutch-Essar	14,410	15,545	49,237	53,368	47,34
RCOM	-	NA	62,683	76,629	79,17
ldea	14,911	8,079	30,611	36,842	30,52
Capex to sales (%) - wireless					
Bharti	55%	53%	52%	39%	279
Hutch-Essar	0%	27%	55%	40%	289
RCOM	0%	NA	58%	49%	419
ldea	67%	27%	71%	56%	369
Revenues – wireless (Rs m)					
Bharti	52,976	80,822	144,420	207,156	257,77
Hutch-Essar	-	56,630	89,522	133,421	169,08
RCOM	-	74,070	107,440	155,019	194,90
ldea	22,464	29,489	43,210	65,111	84,38
EBITDA — wireless (Rs m)					
Bharti	18,507	29,565	52,717	79,414	100,36
Hutch-Essar	-	18,339	29,542	46,697	61,71
RCOM	-	22,411	39,617	57,455	74,83
ldea	8,210	10,674	14,635	21,873	29,76

## http://deadpresident.blogspot.com Financial Summary Tables

· ····aiioiai oaiiiiiai y iabi	-			
Figure 30. Income Statement (Rs m)				
v 1: 14 1.01	2225	0000	00075	

Year ending March 31	2005	2006	2007E	2008E	2009E
Service Revenue	22,464	29,489	43,210	65,111	84,382
Equipment Sales	93	166	169	172	176
Total Income	22,557	29,655	43,379	65,284	84,558
Cost of Trading Goods	(84)	(76)	(164)	(167)	(171)
License Fees	(1,472)	(2,152)	(3,258)	(5,695)	(8,110)
Interconnect & Roaming Charges	(5,151)	(6,485)	(9,080)	(13,511)	(16,974)
Network Operating Cost	(1,692)	(2,189)	(4,482)	(6,669)	(8,225)
Staff Costs	(1,419)	(1,734)	(1,875)	(2,676)	(3,470)
Selling Costs	(2,923)	(4,553)	(7,608)	(10,970)	(13,279)
Admin and Other Exp	(1,606)	(1,793)	(2,277)	(3,721)	(4,566)
Total Opex	(14,347)	(18,981)	(28,744)	(43,410)	(54,796)
EBITDA	8,210	10,674	14,635	21,873	29,762
EBITDA margin	36.4%	36.0%	33.7%	33.5%	35.2%
Net interest	(3,189)	(3,225)	(3,979)	(4,730)	(5,165)
Depreciation & Amortization	(4,427)	(5,495)	(6,857)	(10,847)	(14,215)
PBT	760	2,198	4,294	6,836	10,562
PAT	760	2,118	4,229	6,631	9,379
No of shares	2,260	2,260	2,593	2,635	2,635
EPS	0.1	0.7	1.6	2.5	3.6

Source: Company, Citigroup Investment Research estimates

Source: Citigroup Investment Research estimates

Figure 31. Balance sheet Year ending March 31 2005 2006 2007E 2008E 2009E Shareholders Funds 9,218 11,336 35,735 45,554 54,933 **Equity Share Capital** 22,595 22,595 25,929 26,354 26,354 998 998 22,665 25,428 25,428 Reserves & Surplus (19.205)(12,858)General Reserves (17.088)(6,227)3,152 Preference Share Capital 4,830 4,830 Loan Funds 36,939 32,856 42,411 43,090 52,675 **Current Liabilities & Provisions** 7,153 12,355 20,457 25,216 23,488 Eq Supply Payables 4,169 8,693 15,306 18,421 15,264 Advances from Customers 1,379 1,743 2,579 4,022 5,252 Deposits from Customers 760 1,000 1,000 1,000 699 Other Current Liab 739 1.047 1.400 1,600 1,800 Provisions 106 172 172 172 172 **Total Liabilities** 98,604 131,096 53,310 56,547 113,860 Fixed Assets 35,950 38,769 65,921 91,917 108,229 11,791 11,791 11,791 11,791 11,791 Goodwill on Consolidation 20,891 11,076 Current Assets, Loans & Advances 5,569 5,987 10,152 176 200 250 300 Inventories 114 **Sundry Debtors** 1,514 1,308 1,810 2,256 2,516 Cash & Bank 1,772 1,493 15,000 3,000 3,000 Other Current Assets 514 678 881 1,146 1,260 3,000 3,500 Loans & Advances 1,594 2,394 4,000 **Total Assets** 53,310 56,547 98,604 113,860 131,096

Year ended March 31	2005	2006	2007E	2008E	2009E
Net Profit	760	2,118	4,229	6,631	9,379
Depreciation	8,983	4,370	5,814	9,697	13,065
Change in Working Capital	784	4,505	6,705	3,498	(2,652)
Operating Cash Flow	10,527	10,992	16,748	19,826	19,793
Capex	(16,068)	(7,188)	(32,966)	(35,692)	(29,378)
Acquisitions/Disposals	7,322	-	-	-	-
Investments	(450)	-	-	-	-
Other Investing Cash Flow					
Investing Cash Flow	(9,195)	(7,188)	(32,966)	(35,692)	(29,378)
Borrowings	13,223	(4,083)	9,555	678	9,585
Preference capital	-	-	(4,830)	-	-
Equity Changes	-	-	25,000	3,188	-
Financing Cash Flow	13,223	(4,083)	29,725	3,866	9,585
Opening Cash	962	1,772	1,493	15,000	3,000
Change in Cash	14,555	(279)	13,507	(12,000)	-
Closing Cash	15,517	1,493	15,000	3,000	3,000

## **Company Description**

Idea Cellular, a pure play wireless provider, is the fifth-largest cellular operator in India. It has licenses to provide cellular-phone services in 13 of the 23-telecom circles in India and has an active presence in 11 of them. The company listed on the Indian bourses in March 2007 and is part of the Aditya Birla Group.

#### **Investment Thesis**

We rate Idea as Buy/Low Risk. Continued robust wireless market expansion and Idea's ability to regain its growth potential post its restructuring and full control by Aditya Birla Group are the key factors to our investment argument. The company's IPO provided sufficient funding flexibility to pursue its growth plans. Idea's strong competitive position in its existing circles and comparable operational parameters provide us sufficient comfort in management's ability to execute its plans. Given the spectrum issues facing potential new entrants, Idea should remain relatively unconstrained for the next 12-18 months. As a result, we estimate an earnings CAGR of 47.7% over FY07-09E, well ahead of its peers and more than double that of the broader market. From an industry perspective, we believe that low revenue yields and moderate EBITDA margins leave little room for disruptive pricing. Additionally, most regulatory concerns are now addressed and potentially costly 3G auctions cannot derail it from its growth path, in our view.

#### **Valuation**

We have set our 12-month target price at Rs112 based on Mar-08E DCF, which we think is an appropriate method due to the back-ended nature of free cash flows given the new circle roll-outs. Our DCF assumes a WACC of 10.8% at a target debt to capital of 50.0% and terminal growth rate of 4.0% (similar to Bharti). Our DCF is based on explicit forecasts for FY07-16E with a terminal year EBITDA margin at 37.1% (~200bps below Bharti) and capex/sales of ~10% (in line with Bharti). The target price implies an EV/EBITDA of 11.6x, a slight premium to Bharti's target multiples (for the ex-towerco portion of Rs800), which we believe is supported by (1) higher EBITDA growth rates for Idea; (2) liquidity overflow from Bharti's foreign limit constraints; and (3) M&A possibilities in the long run given Idea's good fit for the potential suitors.

#### Risks

Our quantitative risk rating system assigns a default Speculative Risk rating to Idea due its trading history of less than 12 months. We believe, however, that a Low Risk rating is more appropriate due to the higher visibility of Indian wireless growth, Idea's reasonably competitive position, strong parentage and the reduction of financial leverage post-IPO. Operationally, the risks facing Idea are slightly higher than its more established peers on account of the roll out in new circles. Project cost over-runs, delays in spectrum allocation and hence commercial launches could affect the value accretion opportunity in the new circles. Idea will also face competition from the established players in the new circles and market share gains may be lower than expected.

Idea will incur higher capex requirements in the new circles due to the coverage compulsions, which may depress return parameters in the initial years. Any rollout plans beyond 13 circles may also require a fresh equity infusion. These risk factors could impede the stock from reaching our target price.

# Reliance Communications (RLCM.BO - Rs412.65; 1M) Valuation

We value Indian wireless plays on DCF given the back-ended nature of profits and cash flow. For RCOM, however, we use EV/EBITDA in the absence of a detailed balance sheet. Our 12-month target price of Rs510 is based on 9.7x FY09E EV/EBITDA, a 15% discount to Bharti's target multiple (ex- towerco). We are now assuming a 15% discount to Bharti as against par valuations earlier (i.e. EV/EBITDA of 11.2x FY09E) to reflect the uncertainty on the timing of the GSM rollout and the associated challenges. We expect RCOM's valuation multiples to be determined by Bharti's due to the liquidity overflow from the latter, notwithstanding the risk of technology transition. Meanwhile, higher than average earnings growth (CAGR of 39.0% over FY07-09E) and low sensitivity of wireless demand to interest rates should continue to support premium valuations for the sector.

#### Risks

Our risk-rating system, which tracks 260-day share price volatility, assigns a High Risk rating to RCOM, but we believe Medium Risk is more appropriate. RCOM has been de-merged from Reliance Industries, and its shareholding at the time of listing mirrored the holding of RIL. The stock is therefore unlikely to have risks that are typical of newly listed companies. Besides, growth in the telecoms sector gives visibility to RCOM's prospects. But we believe its evolving financial history and risks pertaining to GSM overlay warrant a risk rating higher than the Low Risk assigned to Bharti. Downside risks to our target price include smaller-than-expected market share, lower-than-anticipated operating leverage (especially in FY07), cost-overruns n GSM overlay, regulatory and competition risks, un-remunerative capex, delays in the ongoing re-organization and more telecom-related paper.

# Bharti Airtel (BRTI.BO - Rs773.50; 1L) Valuation

Our 12-month forward target price of Rs960 is based on core DCF of Rs800 and a towerco option value of Rs158. The core DCF (as on March-08) is based on a WACC of 10.8%, a terminal growth rate of 4% and beta of 0.9 (implying a terminal EV/EBITDA multiple of 8.5x). 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 2009-10. Our target price (net of towerco value) represents a FY09E P/E of 20.8x, P/CEPS of 12.9x and EV/EBITDA of 11.3x. The imputed target P/E (net of towerco) of 25.0x FY08E is at 25% premium to the broad market P/E (20.0x FY08E at the higher end of our Sensex target of 16,000). This, we believe, is justified by above-average earnings growth, improved earnings visibility and relative insulation from macro risks.

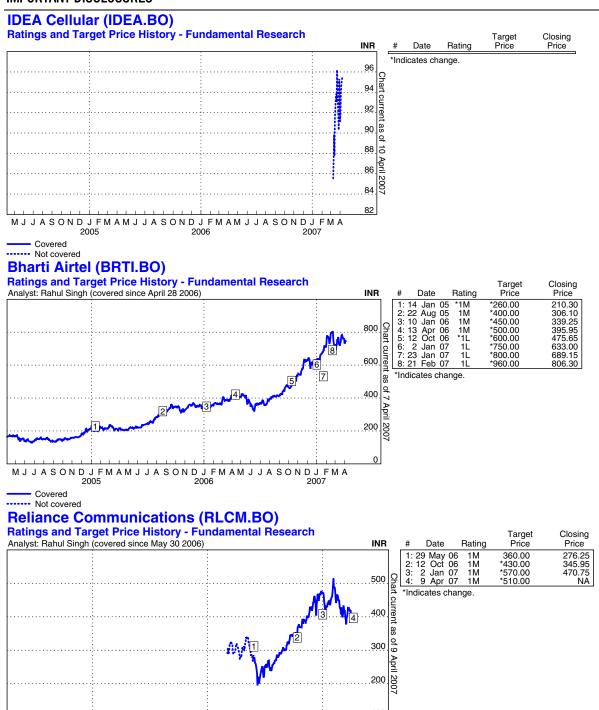
Our quantitative risk-rating system, which tracks 260-day share price volatility, rates Bharti as Low Risk. We are comfortable attributing a Low Risk rating for the following reasons: (1) Bharti has a track record of profitability and execution; (2) the company's capex plans are fully funded; and (3) the strategic shareholding of SingTel leaves us comfortable with execution issues and initiatives. The risks that could prevent the stock from reaching our target price include competition-led tariff pressures, un-remunerative capex, overall market downside, and slower-than-expected execution of the tower sharing initiative.

## Appendix A-1

### **Analyst Certification**

We, Rahul Singh and Anand Ramachandran, CFA, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

#### **IMPORTANT DISCLOSURES**



2007

M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A

2006

2005

Covered
Not covered

12 April 2007

## http://deadpresident.blogspot.com

Rahul Singh holds a long position in the shares of Bharti Airtel.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Bharti Airtel and IDEA Cellular. This position reflects information available as of the prior business day.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from IDEA Cellular.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Bharti Airtel and IDEA Cellular in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as investment banking client(s): IDEA Cellular.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, securities-related: Bharti Airtel and IDEA Cellular.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, non-securities-related: Bharti Airtel and IDEA Cellular.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability, which includes revenues from, among other business units, the Private Client Division, Institutional Sales and Trading, and Investment Banking.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citigroup Investment Research product ("the Product"), please contact Citigroup Investment Research, 388 Greenwich Street, 29th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Private Client Division clients should refer to www.smithbarney.com/research. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citigroup Investment Research Ratings Distribution			
Data current as of 31 March 2007	Buy	Hold	Sell
Citigroup Investment Research Global Fundamental Coverage (3215)	45%	40%	15%
% of companies in each rating category that are investment banking clients	45%	42%	32%
India Asia Pacific (130)	58%	14%	28%
% of companies in each rating category that are investment banking clients	42%	50%	42%

#### **Guide to Fundamental Research Investment Ratings:**

Citigroup Investment Research's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of Citigroup Investment Research's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

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.

#### **Guide to Corporate Bond Research Credit Opinions and Investment Ratings:**

Citigroup Investment Research's corporate bond research issuer publications include a fundamental credit opinion of Improving, Stable or Deteriorating and a complementary risk rating of Low (L), Medium (M), High (H) or Speculative (S) regarding the credit risk of the company featured in the report. The fundamental credit opinion reflects the CIR analyst's opinion of the direction of credit fundamentals of the issuer without respect to securities market vagaries. The fundamental credit opinion is not geared to, but should be viewed in the context of debt ratings issued by major public debt ratings companies such as Moody's Investors Service, Standard and Poor's, and Fitch Ratings.

CBR risk ratings are approximately equivalent to the following matrix:

Low Risk -- Triple A to Low Double A
Low to Medium Risk -- High Single A through High Triple B
Medium to High Risk -- Mid Triple B through High Double B
High to Speculative Risk -- Mid Double B and Below

The risk rating element illustrates the analyst's opinion of the relative likelihood of loss of principal when a fixed-income security issued by a company is held to maturity, based upon both fundamental and market risk factors. Certain reports published by Citigroup Investment Research will also include investment ratings on specific issues of companies under coverage which have been assigned fundamental credit opinions and risk ratings. Investment ratings are a function of Citigroup Investment Research's expectations for total return, relative return (to publicly available Citigroup bond indices performance), and risk rating. These investment ratings are: Buy/Overweight -- the bond is expected to outperform the relevant Citigroup bond market sector index (Broad Investment Grade, High Yield Market or Emerging Market), performances of which are updated monthly and can be viewed at http://www.sd.ny.ssmb.com/ using the "Indexes" tab; Hold/Neutral Weight -- the bond is expected to perform in line with the relevant Citigroup bond market sector index; or Sell/Underweight -- the bond is expected to underperform the relevant sector of the Citigroup indexes.

The subject company's share price set out on the front page of this Product is quoted as at 10 April 2007 01:11 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Reliance Communications. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

Citigroup Global Markets Inc. or its affiliates beneficially owns 5% or more of any class of common equity securities of IDEA Cellular.

Citigroup Global Markets Inc. or its affiliates holds a long position in any class of common equity securities of Bharti Airtel and IDEA Cellular.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the subject company(ies) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citigroup Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citigroup Investment Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes o

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the product in the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citigroup Wealth Advisors Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. If the Product was prepared by Citigroup Investment Research and distributed in Japan by Nikko Citigroup Ltd., it is being so distributed under license. Nikko Citigroup Limited is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Akasaka Park Building, 2-20, Akasaka 5-chome, Minato-ku, Tokyo 107-6122. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, which is regulated by Comision Nacional Bancaria v de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd., a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 lambton Quay, Wellington. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through

## http://deadpresident.blogspot.com Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02

Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Taiwan through Citigroup Global Markets Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is regulated by NASD, NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citigroup Investment Research's Products can be found at www.citigroupgeo.com. Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations. The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would be illegal. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. Advice in the Product has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs.

© 2007 Citigroup Global Markets Inc. Citigroup Investment Research is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. Citigroup and the Umbrella Device are trademarks and service marks of Citigroup or its affiliates and are used and registered throughout the world. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST