

## Company

8 October 2009 | 23 pages

# Indian Wireless

## Earnings Take a Structural Hit, Could Be Knock-Out Blow for Some

- Reducing sector earnings, valuation targets** — We cut FY11E earnings for Bharti, RCOM and Idea by 17%, 27% and 70%, respectively, to factor in lower rev/min as the threat of incumbents retaliating has increased. We downgrade Bharti to Hold (from Buy) with TP of Rs370; and RCOM to Sell (from Hold) with TP of Rs210. Maintain Sell rating on Idea with TP of Rs55.
- Earnings growth may have to wait till FY12** — Given that new tariffs stand to earn marginal EBITDA/min (if at all), the industry will be driven toward consolidation. Incumbents will gain as they win back MOUs from competition and as the residual elasticity (especially in NLD) manifests. But these changes will take time and will drive earnings only in FY12 (16-25% yoy).
- Bharti has little downside** — On stress-case assumptions, i.e., 25% decline in rev/min from current levels and only 2-4% MOU growth, Bharti is trading at 13.5x PER, a 10% discount to market multiple. This therefore poses little downside; the sharp sell-off over the last few trading sessions is probably a reflection of its wide holding rather than its relative fundamental standing.
- Operating/financial leverage could be back-breaking for RCOM/Idea** — In this environment, RCOM and Idea are most vulnerable (among the listed ops). High gearing and relatively lesser scale could constrain their capex (especially if MOUs spurt sharply post tariff cuts) and ability to participate in 3G. Implication for the new entrants is also quite obvious.
- Upside risks** – Higher than expected elasticity, delay in MNP, immediate M&A.

---

### Rahul Singh

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

Gaurav Malhotra, CFA  
gaurav.a.malhotra@citi.com

Anand Ramachandran, CFA  
anand.ramachandran@citi.com

---

Ticker	Rating		Target Price		Current Year Earnings Estimates		Next Year Earnings Estimates	
	Old	New	Old	New	Old	New	Old	New
BRTI.BO	1L	2L	Rs465.00	Rs370.00	Rs24.99	Rs24.54	Rs30.16	Rs25.12
IDEA.BO	3M	3M	Rs80.00	Rs55.00	Rs2.57	Rs2.09	Rs2.90	Rs0.86
RLCM.BO	2M	3M	Rs310.00	Rs210.00	Rs22.60	Rs18.96	Rs24.43	Rs17.90

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

## Revenue per min to decline faster

We have meaningfully revised our rev/min assumptions for all operators for FY11E. While the incumbents are likely to adopt a wait-and-watch approach initially to RCOM's new tariffs, they will have to eventually match these tariffs (directly or indirectly) given the high churn-environment in pre-paid and implementation of MNP over 3-6 months.

Tata DoCoMo's offer of 1p/sec and RCOM's offer of 50p/min work out to blended rev/min of 35-40p (excluding NLD/roaming/ILD). While it is a driver to our RPM changes, we maintain a premium to the incumbents given higher roaming, VAS and post-paid contribution. Given the lead taken by RCOM and Tata Docomo, we also maintain a 2p premium in RPM for Bharti/Idea over RCOM.

The MoU trend will follow the rev/min trend, i.e., RCOM benefits in FY10/11 given first-mover advantage as usage shifts from others' networks (till others react) as well as from some benefits of elasticity of usage, which should reappear after the aggressive tariff cuts. The GSM incumbents too are likely to benefit from the winning back of MOUs and/or elasticity as can be seen in our FY12E assumptions.

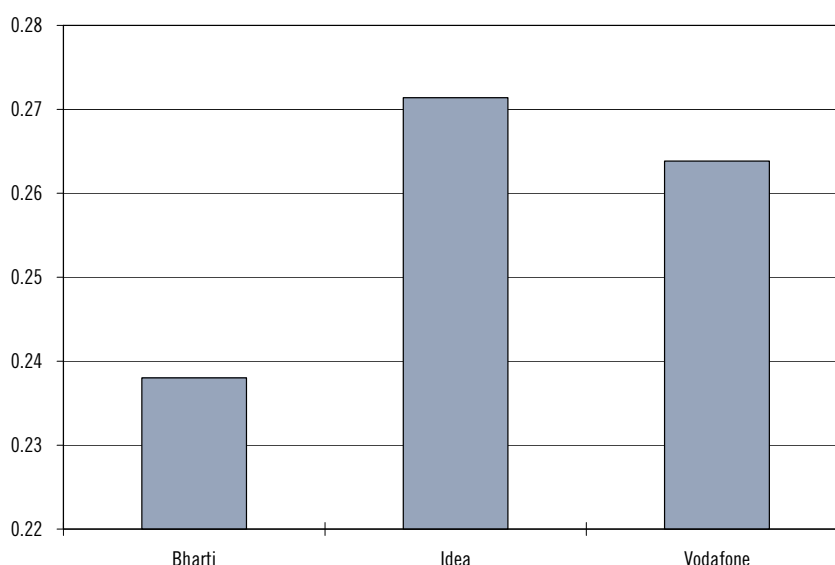
Figure 1. KPI revision

	1QFY10	FY10E			FY11E			FY12E		
		Old	New	Change	Old	New	Change	Old	New	Change
<b>Bharti</b>										
MoU (mins)	478	521	464	-11.0%	526	470	-10.6%	530	489	-7.7%
Rev/min (Rs)	0.58	0.50	0.52	2.6%	0.46	0.44	-4.3%	0.43	0.42	-2.0%
ARPU (Rs)	280	263	240	-8.7%	243	208	-14.5%	228	206	-9.5%
<b>RCOM</b>										
MoU (mins)	365	370	375	1.4%	375	400	6.7%	385	405	5.2%
Rev/min (Rs)	0.58	0.55	0.51	-7.3%	0.50	0.42	-16.0%	0.48	0.40	-16.0%
ARPU (Rs)	210	204	191	-6.0%	188	168	-10.4%	183	162	-11.6%
<b>Idea</b>										
MoU (mins)	399	421	384	-8.9%	425	391	-8.0%	427	409	-4.4%
Rev/min (Rs)	0.58	0.51	0.52	2.7%	0.46	0.44	-3.2%	0.42	0.42	-0.5%
ARPU (Rs)	232	214	200	-6.5%	194	173	-10.9%	179	171	-4.8%

Source: Citi Investment Research and Analysis

## Likely consolidation, the only silver lining

As has been highlighted below, the frontline GSM operators had a fixed cost/min of 24-27p/min in Q1FY10. The new rev/min trend of 35-40p/min can at best generate marginal EBITDA thus driving smaller-scale operators toward eventual consolidation. It could also impact scaling back of new entrant plans or force them to look at acquiring an existing operator.

**Figure 2. 1Q10 fixed cost/min – new entrants cannot match the incumbents' scale advantage**

Source: Citi Investment Research and Analysis, Company data

## Growth may have to wait till FY12E

Our assumptions result in a sharp cut in earnings in FY10-11E before normalizing from FY12E onwards, as elasticity and tariff stability (partly contingent on consolidation) come back.

The trend of earnings revision also highlights the advantages of scale and vulnerability of high financial and low operating leverage. While FY10-11E EBITDA has been downgraded by 10-20% across the 3 telcos, EPS downgrades have been sharper in the cases of RCOM/Idea as compared with Bharti.

**Figure 3. Earnings revisions**

	FY10E			FY11E			FY12E		
	Old	New	Change	Old	New	Change	Old	New	Change
<b>Bharti</b>									
Wireless EBITDA	106,530	100,724	-5.5%	123,085	98,750	-19.8%	130,940	123,550	-5.6%
Consol EBITDA	182,452	161,101	-11.7%	220,104	168,463	-23.5%	250,486	200,365	-20.0%
EPS	25.0	24.5	-1.8%	30.2	25.1	-16.7%	33.7	31.3	-7.2%
<b>RCOM</b>									
Wireless EBITDA	79,298	67,992	-14.3%	91,264	68,879	-24.5%	102,824	74,753	-27.3%
Consol EBITDA	108,951	97,645	-10.4%	129,888	105,042	-19.1%	145,630	115,590	-20.6%
EPS	22.6	19.0	-16.1%	24.4	17.9	-26.7%	28.6	20.8	-27.3%
<b>Idea</b>									
Standalone EBITDA	31,979	29,611	-7.4%	39,437	27,923	-29.2%	44,546	33,561	-24.7%
Consol EBITDA	34,868	32,500	-6.8%	43,137	31,623	-26.7%	48,753	37,768	-22.5%
EPS	2.6	2.1	-18.6%	2.9	0.9	-70.2%	3.1	1.6	-48.7%

Source: Citi Investment Research and Analysis

## Valuations reflect changing business perception

We have revised our valuation methodology for Bharti from DCF to P/E as DCF focuses on back-ended returns while investors will be more concerned about the impact of the new tariffs on near-term earnings. As a result we now value Bharti's core business at Rs312 based on 14.0x FY11E P/E, i.e. at a 10% discount to the broad market given uncertainty over the next 12-18 months on earnings from high competition. Indus is valued at US\$11.4bn with Bharti's proportionate stake valued at Rs55/share.

Idea's new TP is Rs55 comprising core business valued at 6.1x FY11 EV/EBITDA, i.e., at a 10% discount to Bharti's imputed FY11E EV/EBITDA multiple. Idea's proportionate stake in Indus remains unchanged at Rs21/share as Indus' tenancy (and hence valuation) is relatively less reliant on non-JV operators compared to RTIL and third-party towercos.

RCOM's revised TP is at Rs210 and comprises core business value of Rs170/share, which similar to Idea, is valued at 6.1x FY11E EV/EBITDA. The towerco valued at Rs40/share is net of value generated from internal tenancy.

**Figure 4. Target price breakdown**

	TP (Rs)	Core business value (Rs)	Towerco value (Rs)	Valuation methodology
Bharti	370	312	55	14.0x FY11E P/E at a 10% discount to market
Idea	55	34	21	6.1x FY11E EV/EBITDA at a 10% disc to Bharti's imputed multiple
RCOM	210	170	40	6.1x FY11E EV/EBITDA at a 10% disc to Bharti's imputed multiple

Source: Citi Investment Research and Analysis

## Company Focus

Rating change   
 Target price change   
 Estimate change

<b>Hold/Low Risk</b>	<b>2L</b>
<i>from Buy/Low Risk</i>	
Price (08 Oct 09)	Rs334.65
Target price	Rs370.00
<i>from Rs465.00</i>	
Expected share price return	10.6%
Expected dividend yield	0.7%
<b>Expected total return</b>	<b>11.3%</b>
Market Cap	Rs1,270,581M US\$27,236M

### Price Performance (RIC: BRTI.BO, BB: BHARTI IN)



## Bharti Airtel (BRTI.BO)

### Downgrade to Hold: Stock Factoring in Lower Tariffs but no Consolidation

- Downgrade to Hold, TP of Rs370** — We reduce FY11E EPS by 17% as we factor in lower RPM & margins though MOUs could come back. Target of Rs370 is based on 14x core FY11E earnings (ex-Indus) of 22.3 (at 10% discount to market PER) plus Indus stake value of Rs55/share. Indus' valuation remains unchanged despite imminent consolidation – its tenancy is relatively less reliant on non-JV operators compared with other operator owned/independent towercos; long-term tenancy for Indus is 2.4.
- Low downside, but stock could remain range-bound** — Our reduced RPM, down 25% from present level of 58p, factors in aggressive response by incumbents triggered by RCOM's new price offer. On stress-case earnings forecasts, the stock is trading at 13.5x FY11E (including Indus), which is at a 10% discount to market PER thus protecting downside. But meaningful upside from the present levels is contingent on (i) manifestation of elasticity coming back and (ii) tangible regulatory changes to facilitate M&A.
- Sell-off reflects wide stock holding rather than relative fundamental standing** — The stock was down 23% the past week on the concerns of the impact on profitability. Yet the company still remains best placed to weather the storm – clean B/S, large scale and coverage – relative to other listed and unlisted peers. We believe the market may be completely ignoring that the company is best positioned to bounce back in FY12E after meaningful consolidation and scaling back by the new entrants.
- Risks** – Downside risks comprise continued irrational pricing behavior

### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2008A	67,008	17.65	57.2	19.0	5.7	37.4	0.0
2009A	84,700	22.31	26.4	15.0	4.2	32.2	0.3
2010E	93,179	24.54	10.0	13.6	3.3	27.0	0.7
2011E	95,358	25.12	2.3	13.3	2.7	22.4	1.1
2012E	118,756	31.28	24.5	10.7	2.3	23.2	1.9

Source: Powered by dataCentral

Fiscal year end 31-Mar	2008	2009	2010E	2011E	2012E
<b>Valuation Ratios</b>					
P/E adjusted (x)	19.0	15.0	13.6	13.3	10.7
EV/EBITDA adjusted (x)	11.6	8.9	8.3	7.6	6.0
P/BV (x)	5.7	4.2	3.3	2.7	2.3
Dividend yield (%)	0.0	0.3	0.7	1.1	1.9
<b>Per Share Data (Rs)</b>					
EPS adjusted	17.65	22.31	24.54	25.12	31.28
EPS reported	17.65	22.31	24.54	25.12	31.28
BVPS	58.64	80.06	101.85	122.69	146.83
DPS	0.00	1.00	2.45	3.80	6.35
<b>Profit &amp; Loss (RsM)</b>					
Net sales	270,250	369,616	387,705	433,326	499,677
Operating expenses	-193,796	-265,518	-280,812	-326,915	-368,123
<b>EBIT</b>	<b>76,454</b>	<b>104,098</b>	<b>106,894</b>	<b>106,411</b>	<b>131,554</b>
Net interest expense	-2,341	-11,613	-5,427	-2,618	1,110
Non-operating/exceptionals	2,423	589	6,182	10,722	17,214
<b>Pre-tax profit</b>	<b>76,536</b>	<b>93,074</b>	<b>107,648</b>	<b>114,515</b>	<b>149,878</b>
Tax	-8,378	-6,615	-13,994	-18,322	-29,976
Extraord./Min.Int./Pref.div.	-1,150	-1,759	-475	-834	-1,147
<b>Reported net income</b>	<b>67,008</b>	<b>84,700</b>	<b>93,179</b>	<b>95,358</b>	<b>118,756</b>
Adjusted earnings	67,008	84,700	93,179	95,358	118,756
Adjusted EBITDA	113,225	150,086	161,101	168,463	200,365
<b>Growth Rates (%)</b>					
Sales	45.9	36.8	4.9	11.8	15.3
EBIT adjusted	55.1	36.2	2.7	-0.5	23.6
EBITDA adjusted	52.7	32.6	7.3	4.6	18.9
EPS adjusted	57.2	26.4	10.0	2.3	24.5
<b>Cash Flow (RsM)</b>					
<b>Operating cash flow</b>	<b>128,958</b>	<b>140,432</b>	<b>137,496</b>	<b>153,477</b>	<b>161,363</b>
Depreciation/amortization	36,771	45,988	54,207	62,052	68,811
Net working capital	17,127	1,404	-7,006	3,336	-9,026
<b>Investing cash flow</b>	<b>-100,950</b>	<b>-143,340</b>	<b>-83,510</b>	<b>-76,399</b>	<b>-59,794</b>
Capital expenditure	-99,109	-146,406	-87,187	-82,084	-68,609
Acquisitions/disposals	-2,578	2,066	0	0	0
<b>Financing cash flow</b>	<b>61,983</b>	<b>7,230</b>	<b>-29,568</b>	<b>-34,534</b>	<b>-39,825</b>
Borrowings	44,602	3,795	-10,000	-10,000	-5,000
Dividends paid	0	0	-10,464	-16,230	-27,121
<b>Change in cash</b>	<b>89,991</b>	<b>4,321</b>	<b>24,418</b>	<b>42,545</b>	<b>61,743</b>
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>469,872</b>	<b>596,391</b>	<b>674,490</b>	<b>751,399</b>	<b>834,247</b>
Cash & cash equivalent	54,863	49,070	73,488	116,033	177,776
Accounts receivable	28,062	28,528	34,033	33,422	33,535
Net fixed assets	353,654	449,499	485,083	505,115	504,913
<b>Total liabilities</b>	<b>244,274</b>	<b>281,742</b>	<b>276,651</b>	<b>273,598</b>	<b>263,665</b>
Accounts payable	0	0	0	0	0
Total Debt	97,063	118,800	108,800	98,800	93,800
<b>Shareholders' funds</b>	<b>225,598</b>	<b>314,649</b>	<b>397,839</b>	<b>477,801</b>	<b>570,583</b>
<b>Profitability/Solvency Ratios (%)</b>					
EBITDA margin adjusted	41.9	40.6	41.6	38.9	40.1
ROE adjusted	37.4	32.2	27.0	22.4	23.2
ROIC adjusted	28.9	28.9	22.4	19.8	22.2
Net debt to equity	18.7	22.2	8.9	-3.6	-14.7
Total debt to capital	30.1	27.4	21.5	17.1	14.1

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



**Figure 1. Income Statement (Rs m)**

<b>Year to Mar</b>	<b>2009</b>	<b>2010E</b>	<b>2011E</b>	<b>2012E</b>
Mobile	303,104	318,468	354,063	417,655
Fixed	33,603	35,260	37,671	40,244
Long Distance	67,937	68,786	75,149	78,531
Enterprise	16,945	20,334	22,367	24,604
Towerco	27,933	34,994	41,218	44,750
Eliminations	(79,907)	(90,137)	(97,143)	(106,106)
<b>Total Revenues</b>	<b>369,616</b>	<b>387,705</b>	<b>433,326</b>	<b>499,677</b>
Reported EBITDA	150,086	161,101	168,463	200,365
<i>EBITDA margins %</i>	<i>40.6%</i>	<i>41.6%</i>	<i>38.9%</i>	<i>40.1%</i>
<i>Mobile %</i>	<i>30.9%</i>	<i>31.6%</i>	<i>27.9%</i>	<i>29.6%</i>
<i>Fixed %</i>	<i>42.0%</i>	<i>42.9%</i>	<i>42.7%</i>	<i>42.2%</i>
<i>Long Distance %</i>	<i>44.5%</i>	<i>42.5%</i>	<i>41.9%</i>	<i>41.3%</i>
<i>Enterprise %</i>	<i>44.3%</i>	<i>44.9%</i>	<i>45.0%</i>	<i>45.3%</i>
<i>Towerco %</i>	<i>37.0%</i>	<i>42.0%</i>	<i>47.0%</i>	<i>51.0%</i>
Net finance costs	(11,613)	(5,427)	(2,618)	1,110
Depreciation	(43,690)	(51,970)	(59,939)	(66,815)
Amortization	(2,298)	(2,237)	(2,113)	(1,996)
Operating profits	92,485	101,466	103,793	132,664
Other income	1,522	-	-	-
EBT pre exceptionals	94,007	101,466	103,793	132,664
Share of profits in JV	(713)	6,182	10,722	17,214
Non recurring items	(220)	-	-	-
PBT	93,074	107,648	114,515	149,878
Tax	(6,615)	(13,994)	(18,322)	(29,976)
<i>Rate(%)</i>	<i>7.1%</i>	<i>13.0%</i>	<i>16.0%</i>	<i>20.0%</i>
PAT	86,459	93,654	96,192	119,902
Minority interest	(1,759)	(475)	(834)	(1,147)
Profit/ (loss) for the year	84,700	93,179	95,358	118,756
Outstanding shares	3,796	3,796	3,796	3,796
Consolidated EPS	22.3	24.5	25.1	31.3

Source: Citi Investment Research and Analysis, Company data

**Figure 2. Balance Sheet (Rs m)**

<b>As of March</b>	<b>2009</b>	<b>2010E</b>	<b>2011E</b>	<b>2012E</b>
<b>SOURCE OF FUNDS</b>				
Shareholders funds	303,945	386,660	465,788	557,423
Share capital	18,982	18,982	18,982	18,982
Additional capital	74,299	74,299	74,299	74,299
Reserve and surplus	210,663	293,378	372,506	464,141
Loan funds	118,800	108,800	98,800	93,800
Minority interest	10,704	11,179	12,014	13,160
Other non current liabilities	10,564	11,093	11,093	11,093
<b>Total Liability</b>	<b>444,014</b>	<b>517,732</b>	<b>587,694</b>	<b>675,475</b>
<b>APPLICATION OF FUNDS</b>				
Intangibles	40,364	38,126	36,013	34,016
Net PP&E block	373,998	411,818	433,964	435,758
Capital WIP	35,138	35,138	35,138	35,138
Total net assets	449,499	485,083	505,115	504,913
Investments	128	6,309	17,032	34,245
Deferred tax asset (net)	1,254	1,254	1,254	1,254
<b>Current assets</b>				
Inventories	963	1,190	2,024	2,619
Sundry debtors	28,528	34,033	33,422	33,535
Cash and bank balances	49,070	73,488	116,033	177,776
Other current assets, loans and advances	56,708	62,378	65,497	68,772
<b>Less: current liabilities and provisions</b>				
Current liabilities	152,377	156,758	163,705	158,772
Provisions	-	-	-	-
Total current liabilities	152,377	156,758	163,705	158,772
Net current assets	(17,109)	14,331	53,271	123,930
Other Non current assets	10,242	10,754	11,023	11,133
<b>Total Assets</b>	<b>444,014</b>	<b>517,731</b>	<b>587,694</b>	<b>675,475</b>

Source: Citi Investment Research and Analysis, Company data



## Company Focus

Target price change   
Estimate change

<b>Sell/Medium Risk</b>	<b>3M</b>
Price (08 Oct 09)	Rs62.50
Target price	Rs55.00
	<i>from Rs80.00</i>
Expected share price return	-12.0%
Expected dividend yield	0.0%
<b>Expected total return</b>	<b>-12.0%</b>
Market Cap	Rs193,756M
	US\$4,153M

### Price Performance (RIC: IDEA.BO, BB: IDEA IN)



## IDEA Cellular (IDEA.BO)

### Maintain Sell

- TP reduced on rising threat to match RCOM's tariffs** — New TP at Rs55/share is based on core business at Rs34/share (Rs59 earlier) and Idea's 16% stake in Indus at Rs21/share. The core business is valued at 6.1x FY11E EV/EBITDA at a 10% discount to Bharti's imputed multiple. Towerco value remains unchanged despite greater probability of consolidation now as Indus' tenancy is relatively less reliant on non-JV operators compared with other operator owned/independent towercos.
- Earnings take a hit** — The tariff war initiated by RCOM leaves Idea most vulnerable among the listed incumbents given 1) higher operating leverage from a smaller scale and 2) high proportion of new circle launches, which have yet to stabilize. Our FY10-11E EBITDA as a result is lowered by 7-27%, though the downgrade is far sharper at the PAT level (20-70%).
- M&A premium surfacing again?** — The low tariffs resulting in only marginal EBITDA/min generation will drive smaller-scale operators/new launches toward consolidation. Upside risks to our target price include faster-than-expected M&A activity, which we believe is 12-15 months away, with Idea possibly as one of the acquisition targets.
- Maintain Sell** — We believe Idea's current valuation of 9.2x FY11E EV/EBITDA is rich at a 25% premium to Bharti. The new rev/min trend is likely to constrain its capex decisions, especially if MoUs spurt post tariff cuts, and also its ability to participate in 3G.

### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2008A	10,423	3.96	104.2	15.8	4.6	36.4	0.0
2009A	8,756	2.68	-32.2	23.3	1.7	11.4	0.0
2010E	6,834	2.09	-21.9	29.9	1.6	5.6	0.0
2011E	2,818	0.86	-58.8	72.5	1.6	2.2	0.0
2012E	5,150	1.58	82.8	39.6	1.5	3.9	0.0

Source: Powered by dataCentral

Fiscal year end 31-Mar	2008	2009	2010E	2011E	2012E
<b>Valuation Ratios</b>					
P/E adjusted (x)	15.8	23.3	29.9	72.5	39.6
EV/EBITDA adjusted (x)	10.4	8.7	7.8	8.7	7.4
P/BV (x)	4.6	1.7	1.6	1.6	1.5
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
<b>Per Share Data (Rs)</b>					
EPS adjusted	3.96	2.68	2.09	0.86	1.58
EPS reported	3.96	2.68	2.09	0.86	1.58
BVPS	13.45	36.38	38.47	39.33	40.91
DPS	0.00	0.00	0.00	0.00	0.00
<b>Profit &amp; Loss (RsM)</b>					
Net sales	67,200	102,722	127,161	146,684	168,298
Operating expenses	-53,450	-88,969	-115,304	-139,450	-157,845
<b>EBIT</b>	<b>13,750</b>	<b>13,753</b>	<b>11,856</b>	<b>7,234</b>	<b>10,453</b>
Net interest expense	-2,776	-4,586	-4,737	-4,299	-5,088
Non-operating/exceptionals	175	0	0	0	0
<b>Pre-tax profit</b>	<b>11,148</b>	<b>9,167</b>	<b>7,119</b>	<b>2,935</b>	<b>5,365</b>
Tax	-725	-412	-285	-117	-215
Extraord./Min.Int./Pref.div.	0	0	0	0	0
<b>Reported net income</b>	<b>10,423</b>	<b>8,756</b>	<b>6,834</b>	<b>2,818</b>	<b>5,150</b>
Adjusted earnings	10,423	8,756	6,834	2,818	5,150
Adjusted EBITDA	22,518	28,001	32,500	31,623	37,768
<b>Growth Rates (%)</b>					
Sales	53.9	52.9	23.8	15.4	14.7
EBIT adjusted	73.3	0.0	-13.8	-39.0	44.5
EBITDA adjusted	53.7	24.3	16.1	-2.7	19.4
EPS adjusted	104.2	-32.2	-21.9	-58.8	82.8
<b>Cash Flow (RsM)</b>					
<b>Operating cash flow</b>	<b>24,036</b>	<b>20,616</b>	<b>24,978</b>	<b>27,900</b>	<b>35,746</b>
Depreciation/amortization	8,768	14,248	20,644	24,388	27,315
Net working capital	2,221	-6,973	-7,238	-3,605	-1,807
<b>Investing cash flow</b>	<b>-59,768</b>	<b>-53,472</b>	<b>-42,666</b>	<b>-30,413</b>	<b>-25,464</b>
Capital expenditure	-55,726	-61,536	-47,641	-36,572	-30,834
Acquisitions/disposals	-4,965	0	0	0	0
<b>Financing cash flow</b>	<b>15,661</b>	<b>108,832</b>	<b>8,906</b>	<b>-10,458</b>	<b>-10,458</b>
Borrowings	16,991	46,952	18,619	0	0
Dividends paid	0	0	0	0	0
<b>Change in cash</b>	<b>-20,071</b>	<b>81,566</b>	<b>-8,782</b>	<b>-12,971</b>	<b>-176</b>
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>128,283</b>	<b>288,689</b>	<b>307,798</b>	<b>308,221</b>	<b>312,192</b>
Cash & cash equivalent	4,975	66,590	57,808	44,838	44,661
Accounts receivable	1,986	3,698	2,475	2,408	2,432
Net fixed assets	89,270	151,878	180,929	195,165	200,738
<b>Total liabilities</b>	<b>92,837</b>	<b>169,862</b>	<b>182,136</b>	<b>179,741</b>	<b>178,563</b>
Accounts payable	17,599	0	0	0	0
Total Debt	65,154	112,106	130,725	130,725	130,725
<b>Shareholders' funds</b>	<b>35,446</b>	<b>118,828</b>	<b>125,662</b>	<b>128,480</b>	<b>133,630</b>
<b>Profitability/Solvency Ratios (%)</b>					
EBITDA margin adjusted	33.5	27.3	25.6	21.6	22.4
ROE adjusted	36.4	11.4	5.6	2.2	3.9
ROIC adjusted	18.9	9.4	5.5	3.0	4.2
Net debt to equity	169.8	38.3	58.0	66.8	64.4
Total debt to capital	64.8	48.5	51.0	50.4	49.5

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



**Figure 1. Income Statement (Rs m)**

<b>Year to Mar</b>	<b>2009</b>	<b>2010E</b>	<b>2011E</b>	<b>2012E</b>
Total revenues	102,722	127,161	146,684	168,298
Reported EBITDA	28,001	32,500	31,623	37,768
EBITDA margins %	27.3%	25.6%	21.6%	22.4%
Interest & Fin Charges	(7,090)	(9,713)	(10,458)	(10,458)
Other Income	2,505	4,976	6,159	5,370
Depreciation and amortisation	(14,248)	(20,644)	(24,388)	(27,315)
PBT	9,167	7,119	2,935	5,365
Provision for Tax	(412)	(285)	(117)	(215)
Effective tax rate (%)	4.5%	4.0%	4.0%	4.0%
PAT	8,756	6,834	2,818	5,150
Basic & Diluted EPS	2.7	2.1	0.9	1.6

Source: Citi Investment Research and Analysis, Company data

**Figure 2. Balance Sheet (Rs m)**

<b>As of March</b>	<b>2009</b>	<b>2010E</b>	<b>2011E</b>	<b>2012E</b>
Shareholders Funds	118,828	125,662	128,480	133,630
Equity Share Capital	32,664	32,664	32,664	32,664
Reserves & Surplus	91,487	91,487	91,487	91,487
General Reserves	(5,324)	1,511	4,329	9,479
Direct addition to ABTL's equity	26,880	26,880	26,880	26,880
Loan Funds	112,106	130,725	130,725	130,725
Current Liabilities & Provisions	29,958	23,613	21,218	20,040
Deferred Tax Liabilities	918	918	918	918
<b>Total</b>	<b>288,689</b>	<b>307,798</b>	<b>308,221</b>	<b>312,192</b>
<b>Application of Funds</b>				
Fixed Assets	173,108	200,105	212,288	215,808
Goodwill on Consolidation	22,522	22,522	22,522	22,522
Non Compete fees	5,440	5,440	5,440	5,440
Current Assets	87,024	79,135	67,374	67,827
Inventories	359	409	460	511
Sundry Debtors	3,698	2,475	2,408	2,432
Cash & Bank	66,590	57,808	44,838	44,661
Other Current Assets	651	716	752	789
Loans & Advances	15,726	17,726	18,916	19,433
Misc expenditure	596	596	596	596
<b>Total</b>	<b>288,689</b>	<b>307,798</b>	<b>308,221</b>	<b>312,192</b>

Source: Citi Investment Research and Analysis, Company data



## Company Focus

Rating change   
 Target price change   
 Estimate change

<b>Sell/Medium Risk</b>	<b>3M</b>
<i>from Hold/Medium Risk</i>	
Price (08 Oct 09)	Rs246.30
Target price	Rs210.00
<i>from Rs310.00</i>	
Expected share price return	-14.7%
Expected dividend yield	0.6%
<b>Expected total return</b>	<b>-14.1%</b>
Market Cap	Rs508,370M US\$10,898M

### Price Performance (RIC: RLCM.BO, BB: RCOM IN)



## Reliance Communications (RLCM.BO) Downgrade to Sell

■ **Downgrade to Sell** — RCOM's TP of Rs210 comprises core business valued at 6.1x FY11E EV/EBITDA; at a 10% discount to Bharti's imputed multiple. The value accretion from external towerco tenants is at Rs40/share. We downgrade RCOM to Sell given 1) high financial leverage that leaves it exposed if traffic does not materialize (possible if Bharti/Voda retaliate immediately); 2) RCOM is currently trading at a premium to Bharti and 3) towerco value vulnerable to industry consolidation.

■ **First-mover advantage reflects in usage but not profits**— We have revised RCOM's FY10-11E usage up 1-7% to reflect some usage elasticity after the sharp tariff cut. The incumbents' likely wait-and-watch policy should help it garner some traffic. Yet FY10-11E EBITDA is cut by 10-19% given that new mins will earn sharply lower EBITDA. EPS is cut by 16-27% over the same time period. Upside risk to earnings is a spurt in usage, which given low network utilization, will come at marginal incremental opex/capex.

■ **High financial leverage** — RCOM's FY10E net debt is estimated at Rs312bn with FY10E net debt/EBITDA at 3.2x. The high leverage in our view leaves RCOM's B/S exposed in case the desired uptick in traffic does not fructify, thus constraining its capital raising plans and 3G bidding.

■ **Towerco value under cloud too** — Reliance Infratel is more dependent on new entrants for external tenancy compared with Indus and therefore is at higher risk from any industry consolidation or cutbacks. The sharp tariff cuts will force rethinking and pace of ramp-up of new entrants and hence their long-term viability as tenants (despite revenue protection clauses). We value the towerco at Rs40/share with downside risks from lower tenancy

### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2008A	55,097	26.69	70.8	9.2	1.8	22.3	0.3
2009A	61,477	29.79	11.6	8.3	1.2	17.2	0.4
2010E	39,134	18.96	-36.3	13.0	1.1	8.9	0.6
2011E	36,951	17.90	-5.6	13.8	1.0	7.8	0.8
2012E	42,979	20.82	16.3	11.8	1.0	8.4	0.8

Source: Powered by dataCentral

Fiscal year end 31-Mar	2008	2009	2010E	2011E	2012E
<b>Valuation Ratios</b>					
P/E adjusted (x)	9.2	8.3	13.0	13.8	11.8
EV/EBITDA adjusted (x)	7.9	8.4	8.7	8.1	7.2
P/BV (x)	1.8	1.2	1.1	1.0	1.0
Dividend yield (%)	0.3	0.4	0.6	0.8	0.8
<b>Per Share Data (Rs)</b>					
EPS adjusted	26.69	29.79	18.96	17.90	20.82
EPS reported	26.69	29.79	18.96	17.90	20.82
BVPS	140.63	204.85	222.12	237.77	256.35
DPS	0.75	1.00	1.50	2.00	2.00
<b>Profit &amp; Loss (RsM)</b>					
Net sales	190,678	229,411	250,510	289,679	321,283
Operating expenses	-136,743	-175,924	-203,190	-240,096	-264,772
<b>EBIT</b>	<b>53,935</b>	<b>53,487</b>	<b>47,320</b>	<b>49,583</b>	<b>56,510</b>
Net interest expense	3,998	7,867	-5,688	-8,977	-8,219
Non-operating/exceptionals	0	0	0	0	0
<b>Pre-tax profit</b>	<b>57,933</b>	<b>61,354</b>	<b>41,632</b>	<b>40,606</b>	<b>48,291</b>
Tax	-2,836	123	-2,498	-3,655	-5,312
Extraord./Min.Int./Pref.div.	0	0	0	0	0
<b>Reported net income</b>	<b>55,097</b>	<b>61,477</b>	<b>39,134</b>	<b>36,951</b>	<b>42,979</b>
Adjusted earnings	55,097	61,477	39,134	36,951	42,979
Adjusted EBITDA	81,989	92,875	97,645	105,042	115,590
<b>Growth Rates (%)</b>					
Sales	31.8	20.3	9.2	15.6	10.9
EBIT adjusted	65.7	-0.8	-11.5	4.8	14.0
EBITDA adjusted	43.3	13.3	5.1	7.6	10.0
EPS adjusted	70.8	11.6	-36.3	-5.6	16.3
<b>Cash Flow (RsM)</b>					
<b>Operating cash flow</b>	<b>106,390</b>	<b>59,756</b>	<b>68,701</b>	<b>108,270</b>	<b>93,604</b>
Depreciation/amortization	28,054	39,388	50,325	55,459	59,080
Net working capital	2,563	-33,243	-32,651	6,883	-16,674
<b>Investing cash flow</b>	<b>-212,034</b>	<b>-255,510</b>	<b>-84,201</b>	<b>-67,570</b>	<b>-57,289</b>
Capital expenditure	-212,034	-255,510	-84,201	-67,570	-57,289
Acquisitions/disposals	0	0	0	0	0
<b>Financing cash flow</b>	<b>86,190</b>	<b>138,951</b>	<b>-6,999</b>	<b>-13,621</b>	<b>-12,863</b>
Borrowings	83,834	133,406	8,378	0	0
Dividends paid	-1,742	-2,322	-3,483	-4,644	-4,644
<b>Change in cash</b>	<b>-19,454</b>	<b>-56,804</b>	<b>-22,499</b>	<b>27,079</b>	<b>23,451</b>
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>774,593</b>	<b>1,022,070</b>	<b>1,033,768</b>	<b>1,082,295</b>	<b>1,108,438</b>
Cash & cash equivalent	117,431	109,724	87,225	114,304	137,755
Accounts receivable	27,224	39,618	41,752	48,280	53,547
Net fixed assets	523,126	727,053	760,929	773,041	771,251
<b>Total liabilities</b>	<b>460,021</b>	<b>592,718</b>	<b>568,764</b>	<b>584,984</b>	<b>572,791</b>
Accounts payable	156,213	159,718	127,387	143,607	131,415
Total Debt	258,217	391,623	400,000	400,000	400,000
<b>Shareholders' funds</b>	<b>314,573</b>	<b>429,352</b>	<b>465,003</b>	<b>497,311</b>	<b>535,646</b>
<b>Profitability/Solvency Ratios (%)</b>					
EBITDA margin adjusted	43.0	40.5	39.0	36.3	36.0
ROE adjusted	22.3	17.2	8.9	7.8	8.4
ROIC adjusted	13.2	8.6	5.7	5.6	6.2
Net debt to equity	44.8	65.7	67.3	57.4	49.0
Total debt to capital	45.1	47.7	46.2	44.6	42.8

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



**Figure 1. Income Statement (Rs m)**

<b>Year to Mar</b>	<b>FY09</b>	<b>FY10E</b>	<b>FY11E</b>	<b>FY12E</b>
Mobile	173,677	188,089	207,155	227,213
Global Business	67,761	81,498	92,111	103,718
Broadband	25,243	29,743	32,680	33,972
Others	10,098	13,127	17,066	22,185
Eliminations	(47,368)	(61,947)	(59,332)	(65,805)
<b>Total revenues</b>	<b>229,411</b>	<b>250,510</b>	<b>289,679</b>	<b>321,283</b>
Reported EBITDA	92,875	97,645	105,042	115,590
<i>EBITDA margins %</i>	<i>40.5%</i>	<i>39.0%</i>	<i>36.3%</i>	<i>36.0%</i>
<i>Mobile %</i>	<i>38.4%</i>	<i>36.1%</i>	<i>33.3%</i>	<i>32.9%</i>
<i>Global Business %</i>	<i>23.9%</i>	<i>24.4%</i>	<i>26.0%</i>	<i>26.6%</i>
<i>Broadband %</i>	<i>45.9%</i>	<i>43.8%</i>	<i>44.8%</i>	<i>44.8%</i>
<i>Others %</i>	<i>-12.7%</i>	<i>-25.0%</i>	<i>-14.4%</i>	<i>-8.9%</i>
Net Interest	7,867	(5,688)	(8,977)	(8,219)
Depreciation & Amortisation	(39,388)	(50,325)	(55,459)	(59,080)
PBT	61,354	41,632	40,606	48,291
Tax	123	(2,498)	(3,655)	(5,312)
<b>PAT</b>	<b>61,477</b>	<b>39,134</b>	<b>36,951</b>	<b>42,979</b>
Number of shares	2,064	2,064	2,064	2,064
EPS	29.8	19.0	17.9	20.8

Source: Citi Investment Research and Analysis, Company data

**Figure 2. Balance Sheet (Rs m)**

<b>As of March</b>	<b>FY09</b>	<b>FY10E</b>	<b>FY11E</b>	<b>FY12E</b>
Equity	10,320	10,320	10,320	10,320
Reserves and Surplus	412,483	448,134	480,442	518,777
Shareholders funds	422,803	458,454	490,762	529,097
Debt	391,623	400,000	400,000	400,000
Current Liabilities	159,718	127,387	143,607	131,415
Minority	6,549	6,549	6,549	6,549
<b>Total Liabilities</b>	<b>1,021,789</b>	<b>1,033,486</b>	<b>1,082,014</b>	<b>1,108,157</b>
Fixed Assets	755,101	922,399	989,969	1,047,258
Accumulated Depreciation	(141,144)	(191,469)	(246,928)	(306,007)
Net Fixed Assets	613,957	730,929	743,041	741,251
CWIP	113,096	30,000	30,000	30,000
Goodwill	52,215	52,215	52,215	52,215
Investments	2,762	2,762	2,762	2,762
Deferred tax assets	(281)	(281)	(281)	(281)
Cash and cash equivalents	109,724	87,225	114,304	137,755
Current Assets	130,316	130,636	139,973	144,455
Inventories	5,427	5,000	5,000	5,000
Debtors	39,618	41,752	48,280	53,547
Other Current Assets	17,714	21,257	22,320	23,436
Loans & Advances	67,557	62,628	64,373	62,472
<b>Total Assets</b>	<b>1,021,789</b>	<b>1,033,486</b>	<b>1,082,014</b>	<b>1,108,157</b>

Source: Citi Investment Research and Analysis, Company data

## **Bharti Airtel**

### **Company description**

Bharti Airtel, through its group companies, provides cellular-phone services in all of India's 23 telecom circles. The group also provides fixed-line phone services, broadband, long-distance and enterprise services. It is listed on The Stock Exchange, Mumbai (BSE) and The National Stock Exchange of India Limited (NSE). Major shareholders are Bharti Telecom, SingTel and Vodafone.

### **Investment strategy**

We rate Bharti shares Hold/Low Risk (2L). We believe Bharti is best positioned to capture Indian wireless growth profitably. However, recent tariffs announced by new entrants and peers create a risk of aggressive retaliation by the incumbents. This reduces growth prospects in FY11, with the return to growth in FY12 contingent on consolidation and comeback of elasticity. Despite the concerns, Bharti remains best positioned to weather the storm given its operational strengths of scale and coverage and clean balance sheet. On the stress-case earnings estimates for FY11E (based on 25% RPM decline and moderate MOU growth), the stock is trading at PER of 14x, a 10% discount to the market. Though this limits downside, the stock will remain range-bound until clear signs emerge regarding (i) pickup in MOUs and/or (ii) industry consolidation.

### **Valuation**

Our target price of Rs370 comprises (i) core business value of Rs312 based on PER of 14x FY11E (at 10% discount to market) on EPS (ex-Indus) of Rs22.3 and (ii) Indus stake value of Rs55/share. We switch over to a PER valuation method as DCF is more back-ended and given the competitive concerns, investors are likely to focus more on near-term earning drivers. The core business value of Rs312 imputes a reasonable EV/EBITDA of 6.6x FY11E.

### **Risks**

Our quantitative risk-rating system, which tracks 260-day share price volatility, rates Bharti shares as Low Risk. We are comfortable with this for the following reasons: 1) Bharti has a track record of profitability and execution; 2) strong balance sheet with low leverage levels (FY10 net debt/EBITDA at 0.2x); and 3) FCF positive in FY10E with major capex behind.

Downside risks include competition-led tariff pressures, excessive bidding for 3G and any adverse regulation. Upside risk could emerge from faster than expected consolidation and sharper than expected pullback in MOUs.

## **IDEA Cellular**

### **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 all of India's 22 telecom circles and an active presence in 14 of them. The company listed on the Indian bourse in March 2007 and is part of the Aditya Birla Group.



## Investment strategy

We rate Idea Sell/Medium Risk. Inclusion in MSCI and relatively cleaner positioning (post Bharti's MTN agenda) could technically benefit Idea. However, smaller relative scale makes it more vulnerable if competition worsens further and makes too much of compromise on valuation risky. We believe that Idea's current valuation, at premium to Bharti, is rich and more than factors the technical benefit to Idea due to its pure-play positioning. Idea's B/S also remains exposed to 3G outgo especially with the delay in auction and improving credit markets.

## Valuation

Our target price of Rs55 is based on (i) core business value at Rs34/share based on 6.1x FY11E EV/EBITDA, at a 10% discount to Bharti's imputed EV/E plus (ii) Indus stake valued at Rs21/share. Given the industry-wide concerns on competition and the likely emergence of Idea as one of the potential acquisition candidates, we reduce the EV/E discount to Bharti from 15% to 10%. We believe some discount to Bharti is justified given 1) Idea's smaller scale makes it more vulnerable to worse-than-expected competitive intensity, 2) its B/S remains most at risk to an aggressive 3G bidding especially with delay in 3G auction and improving credit markets, and 3) our cautious stance on Idea's ability to generate positive NPV in the new circles.

## Risks

We assign a Medium Risk rating to IDEA Cellular, as opposed to the High Risk assigned by our quant risk rating system due to: 1) Idea has demonstrated strong execution skills in new launches (Mumbai & Bihar) and operating leverage in the 11 old circles; 2) Risk of disruptive pricing from new entrants continues to decline; 3) Improving credit markets helped reduce concerns on the high-leverage balance sheets like Idea Cellular's. Upside risks to our target price include any move by Axiata to announce the tender offer, higher-than-expected market share gains, faster EBITDA breakeven in new circles and moderate 3G bidding. Several downside risks could impede the stock from reaching our target price. Operationally, higher-than-expected competition will impact Idea more than peers given its smaller scale. A prolonged EBITDA breakeven in new circles raises concerns on NPV accretion. In addition, the upcoming 3G auction carries an event risk of unduly straining the balance sheet (FY10E Net Debt/EBITDA already at 2.2x) if bidding is aggressive.

## Reliance Communications

### Company description

RCOM is an integrated player in the Indian telecoms sector. It was listed on the Indian stock exchanges following the de-merger of Reliance Industries. RCOM is the second-largest player in the mobile segment, has an 80,000km-long India-wide optic-fiber network and owns the FLAG submarine cable network. RCOM has three business units: 1) Wireless, which includes a nationwide wireless network on CDMA and GSM; 2) Global Business comprising wholesale voice and data; and 3) Broadband for both retail and enterprise.

## Investment strategy

We rate RCOM Sell/Medium Risk. There have been early signs of success of RCOM's GSM foray as traffic growth has picked up and tariffs are stable. However, recent tariff cuts make it susceptible to EBITDA and earnings decline especially given the high leverage (Net Debt/EBITDA of 3.2x FY10E). Sustainability of the performance in the remainder of FY10 will be key especially as RCOM comes up against launches by some of the other new GSM entrants, who will be pursuing the same traffic initially. GSM should help RCOM gain revenue market share, but gains at the operating level will likely be offset by interest and depreciation arising from significant capex. Reliance Infratel has also been signing new tenants, although its dependence on upstarts for tenancy raises question marks on their viability given the worsening competitive scenario.

## Valuation

Our target price of Rs210 comprises (i) core business value of Rs170 based on 6.1x FY11E EV/EBITDA, at 10% discount to Bharti's implied target multiple (ex- towerco) plus (ii) Infratel value accretion of Rs40 based on long-term tenancy of 2.3. We believe some discount to Bharti is justified on account of the inherent risks of dual network, higher leverage, stretched FCF breakeven, and lack of clarity and consistency on accounting policies (especially related to finance income). Our towerco net value accretion of Rs40 is based on following assumptions: 1) Long-term tenancy of 2.3 with captive tenancy of 1.6; 2) Capex recovery of 13%, 3) WACC of 11.3% and terminal growth rate of 3%; 4) Please note that the incremental value accretion to RCOM is calculated after netting off the contribution from the captive tenancy. Thus, it only reflects the value of the external revenues.

## Risks

Our risk-rating system, which tracks 260-day share price volatility, assigns a High Risk rating to RCOM. We however assign Medium Risk rating given the improvement in the B/S and the credit markets. 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.

# 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

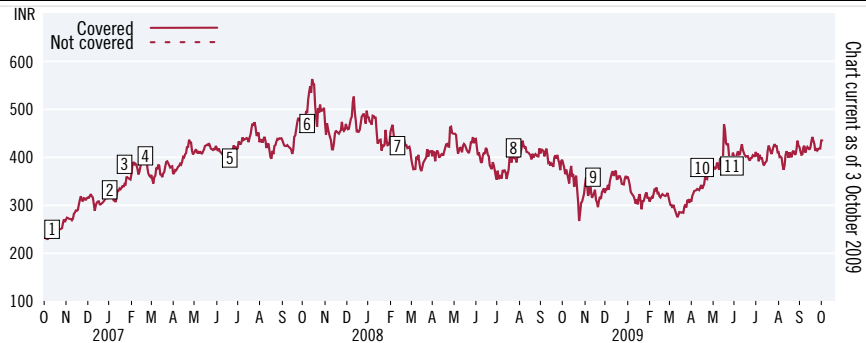


Chart current as of 3 October 2009

Date	Rating	Target Price	Closing Price
1 12-Oct-06	*1L	*300.00	237.83
2 2-Jan-07	1L	*375.00	316.50
3 23-Jan-07	1L	*400.00	344.58
4 21-Feb-07	1L	*480.00	403.15

Date	Rating	Target Price	Closing Price
5 20-Jun-07	1L	*525.00	412.33
6 8-Oct-07	1L	*600.00	492.40
7 12-Feb-08	1L	*575.00	427.90
8 24-Jul-08	1L	*535.00	398.98

Date	Rating	Target Price	Closing Price
9 13-Nov-08	1L	*450.00	315.63
10 16-Apr-09	1L	*420.00	334.38
11 28-May-09	1L	*465.00	397.60

\* 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

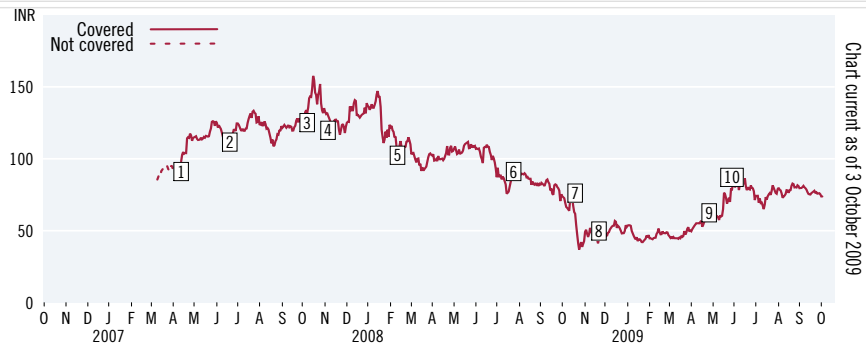


Chart current as of 3 October 2009

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

Date	Rating	Target Price	Closing Price
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

Date	Rating	Target Price	Closing Price
9 26-Apr-09	*2M	*67.00	60.55
10 28-May-09	*3M	*80.00	78.65

\* 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



Chart current as of 3 October 2009

Date	Rating	Target Price	Closing Price	Date	Rating	Target Price	Closing Price	Date	Rating	Target Price	Closing Price
1 12-Oct-06	1M	*430.00	345.95	6 6-Nov-07	*2L	*835.00	745.40	11 30-Apr-09	3H	*190.00	214.95
2 2-Jan-07	1M	*570.00	470.75	7 12-Feb-08	*1L	*760.00	575.70	12 28-May-09	3H	*270.00	297.35
3 9-Apr-07	1M	*510.00	415.60	8 31-Jul-08	*2L	*530.00	500.05	13 2-Aug-09	*2M	*310.00	275.65
4 20-Jun-07	1M	*600.00	505.90	9 2-Nov-08	*2H	*270.00	220.70				
5 8-Oct-07	*1L	*750.00	640.90	10 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.

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

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

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

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

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

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 investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Investment Research & Analysis product ("the Product"), please contact Citi Investment Research & Analysis, 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. 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.

**Citi Investment Research & Analysis Ratings Distribution**

Data current as of 30 Sep 2009

Citi Investment Research & Analysis Global Fundamental Coverage	Buy	Hold	Sell
% of companies in each rating category that are investment banking clients	44%	38%	18%
	47%	45%	36%

**Guide to Citi Investment Research & Analysis (CIRA) Fundamental Research Investment Ratings:**

CIRA'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 CIRA'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 Citi Investment Research & Analysis (CIRA) Corporate Bond Research Credit Opinions and Investment Ratings: CIRA'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 CIRA 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 CIRA 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 CIRA'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://sd.ny.ssm.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.

Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets India Private Limited	Rahul Singh, Gaurav Malhotra, CFA
Citigroup Global Markets Asia	Anand Ramachandran, CFA

## OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 08 October 2009 04:00 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Bharti Airtel. (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](http://www.citigroupgeo.com).)

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 issuer(s) 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 Citi Investment Research & Analysis (CIRA) does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of CIRA 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 only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

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.

**Important Disclosures for Morgan Stanley Smith Barney LLC Customers:** Morgan Stanley & Co. Incorporated (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Investment Research & Analysis (CIRA) research report. Ask your Financial Advisor or use [smithbarney.com](http://smithbarney.com) to view any available Morgan Stanley research reports in addition to CIRA research reports.

Important disclosure regarding the relationship between the companies that are the subject of this CIRA research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at [www.morganstanleysmithbarney.com/researchdisclosures](http://www.morganstanleysmithbarney.com/researchdisclosures).

The required disclosures provided by Morgan Stanley and Citigroup Global Markets, Inc. on Morgan Stanley and CIRA research relate in part to the separate businesses of Citigroup Global Markets, Inc. and Morgan Stanley that now form Morgan Stanley Smith Barney LLC, rather than to Morgan Stanley Smith Barney LLC in its entirety. For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures) and [https://www.citigroupgeo.com/geopublic/Disclosures/index\\_a.html](https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html).

This CIRA research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of CIRA. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant 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. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. 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 is made available in France by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul

Cézanne, 8ème, Paris, France. 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. The Product is made available in Indonesia through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in Italy by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Foro Buonaparte 16, Milan, 20121, Italy. The Product is made available in Japan by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by Nikko Cordial Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. 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, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comision Nacional Bancaria y 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. (Company Number 604457), 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 Pakistan by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul. Chalubinskiego 8, 00-630 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 Gashka Street, 125047 Moscow. The Product is made available in Singapore through 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 Spain by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in Taiwan through Citigroup Global Markets Taiwan Securities Company Ltd., 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 Turkey through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the U.A.E, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different CIRA ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. 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 CIRA's Products can be found at [www.citigroupgeo.com](http://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 not be permitted. 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. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it 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. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product.

the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. 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 has not reviewed the linked site. Equally, 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

---