14 December 2011 | 22 pages

India Wireless

Indian Telecom Tour Takeaways: Toning Down the Dial

■ Industry Overview

- We met with key industry stakeholders – Incumbents, new entrants, towercos, handset vendors as well as industry experts over a two-day trip. Key takeaways include:
- **Regulations: Uncertainty slowly dispersing** — Toning down by the incumbents is visible and the focus seems to be on back-room negotiations. Dilution of M&A norms is a consensus view though as expected there is conflict on spectrum pricing. Refarming remains a risk but will difficult to implement. Interconnect hit should be marginal.
- **Limited leeway for further hikes** — Rev/min should continue to rise in next 2-3 qtrs as the sub base migrates. Any increase beyond is contingent upon incumbents' ability to take further hikes – looks unlikely in the near term as Uninor finds success with low tariffs and grabs market share. Bharti has been the most impacted, losing ~300bps rev mkt shr (12 qtrs). Meanwhile improvement in profitability now depends primarily on rev/min with limited ability to squeeze further efficiencies as networks are already at high utilization.
- **3G: Realistic vs optimistic earlier** — Expectations seem to have toned down. Ramp-up has been slow - active sub - 10%; network utilization - 10%. Premium pricing (vs EDGE) seems to have hit uptake. Operators are now adjusting – 3G prices cut; EDGE raised. Industry is likely to migrate to flat pricing (like developed mkts) to counter this price arbitrage. Feature phones and not smartphones to lead to 3G adoption.
- **Towercos: Focus on energy mgmt & tower rationalization** — Growing realization of excess supply in urban areas and need for rationalization. Cost control (energy) will be critical to drive profitability. Industry migrating towards fixed energy cost though diesel pilferage remains high (~20%). License fees will not hit as MSA provides for pass thru.
- **Stocks starting to reflect near worst case on policy** – Delay/uncertainty on policy has resulted in stock weakness in the last month. We believe negatives in the policy are being overstated with the stocks starting to price in near worst case on regulations. Idea remains Top Pick although Bharti looks relatively better positioned to withstand adverse regulations.

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Figure 1. Statistical Abstract

			M Cap	Price (Rs)	P/E (x)		EV/EBITDA (x)	
Company name	**RIC code**	**Rating**	**US$M**	**13-Dec-11**	**FY12E**	**FY13E**	**FY12E**	**FY13E**
Bharti	BRTI.BO	1	24,988	346	20.4	13.1	7.6	6.3
RCOM	RLCM.BO	1H	2,860	73	10.6	7.4	6.9	5.8
Idea	IDEA.BO	1	5,261	84	44.9	20.4	8.0	6.2

Source: Citi Investment Research and Analysis estimates

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Policy meeting takeaways

Meetings with a senior journalist and member of TRAI spectrum pricing committee

- **Refarming unlikely in the near term** – The senior editor claimed that the likely disruption in services and the accompanying controversy is likely to push back any actual implementation of spectrum refarming. Incumbents instead are likely to be asked to pay higher spectrum charges for 900MHz spectrum. The spectrum committee member however believes that, given 900MHz spectrum can now be used for 3G data services but had previously been allocated as part of pure GSM voice, it should be refarmed and auctioned to allow for a level playing field.

Keeping out incumbent operators with 800/900MHz from 700MHz auction is likely to invite the scrutiny of competition commission

- The DoT and TRAI's proposal of keeping out operators with 800/900MHz spectrum from the 700MHz auction is unlikely to get implemented since it would invite the scrutiny of the competition commission. If implemented, this proposal will keep out both the GSM and CDMA incumbents from auctions, leaving the door open for only 1-2 potential bidders.

- New Telecom policy likely to be out early next year.

- The Govt could cancel licenses on failure to roll out. Eighty of the 122 licenses could potentially get cancelled, which would help alleviate spectrum scarcity as well as make enough spectrum available for potential auctions (this would help lower the market value of spectrum below the estimated value). We believe given the current risk aversion in the Govt, chances of any downward revision to the estimated value is modest.

- The committee member however maintains that the estimated 2G spectrum value (as part of the Feb-11 recommendations) is fair and based on reasonable return assumptions. Besides, the value of spectrum from 2001 (Rs16.5bn) to ~Rs110bn (~6x increase) should be seen in context to the increased size of the addressable market. In addition the operators themselves had aggressively bid for 3G spectrum last year in the auctions, thereby themselves valuing the spectrum up.

Senior editor claimed that investment on 3G appears lower possibly due to uncertainty surrounding quantum of 2G spectrum payments

- **3G capex appears lower than optimal -** The uncertainty surrounding potential spectrum payments (excess charges) has put the operators in quandary given their stretched B/S. The 3G spend (on rollout) seems to be lower-than-optimum with the operators likely conserving cash for potential payments.

- **Money transfer on mobile could be a big opportunity** – Bulk of the population currently uses post offices for any money transfers. The post-office charges a flat fee of Rs15-20 for money transfer and, given the transferred amount is low (typically Rs100-200), the imputed commission (as a %) is high (10-15%). Mobile-based money transfer (like what is prevalent in Africa) therefore has the potential of becoming popular if allowed by the Govt.

Bharti – Not Shaken (as yet), but Stirred?

- **Competition**
  - The competitive intensity though has somewhat lowered compared to the peak, but still remains high. Focus on discounted mins has reduced though aggressive acquisition strategies are still being followed, which is resulting in churn remaining unsustainably high. The company claims that the overall

industry churn is at 12-13%, which is not sustainable given the high dealer/retail commissions in context to incremental ARPU. While some new entrants have started to roll-back coverage by shutting down tower sites, others continue to compete aggressively despite their networks being near peak utilisation.

- Apart from reduction in discounted mins, the other encouraging trend has been the reducing pressure to report high monthly net adds. Rural areas remain the growth areas with relatively low penetration at ~35%.

- New entrants churn is at 20% and the cost of acquisition/retention is high in context to the marginal ARPU.

- The company will not compete with new entrants on prices with the new entrants even at the cost of mins migration. They will however compete aggressively with the incumbents. We had highlighted Bharti's revenue share loss in our June-11 note titled ***"Market share losses – Not Just a leaders' curse"*** https://www.citigroupgeo.com/pdf/SAP82609.pdf.

We revisit the revenue share and find no reversal.

To recap - Bharti's top-line growth has been slower compared to GSM incumbents (Vodafone/Idea) in the last past few quarters. Idea's CQGR since 2QFY09 has been 4.9% while it is 3.6% for Vodafone and Bharti's has only been 1.9%. In addition, it has also lost 310bps revenue market share (pan-India) since 2QFY09 vs gains of 330/250bps by Idea/Vodafone respectively. The slower top-line growth has generally been attributed to its larger scale while the consolidated revenue share gains for Vodafone/Idea have been linked to their new circle launches.

We analyse TRAI data (from 2QFY09 to 2QFY12) which provides excellent granularity of circle-wise operator revenues. We drill deeper to the circle level to analyze how much to attribute the growth/rev share movement to these arguments. In order to normalize for scale distortions, we have taken the top five circles, which together account for 45-55% of each operator's revenues. These circles include:

1. **Bharti** – Karnataka, Delhi, AP, TN, Bihar
2. **Vodafone** – Delhi, Gujarat, Mumbai, TN, UP(E)
3. **Idea** – Maharashtra, AP, Kerala, MP, UP(W)

Bharti lost rev market share in 4/5 top circles

Bharti has lost 90-600bps revenue share in four of the top five circles. The largest revenue contributor (Karnataka; 11% of revenues) has witnessed a 480bps loss. The only circle which saw some improvement has been Andhra Pradesh (170bps). Vodafone on the other hand has witnessed revenue share loss (70-140bps) in only two of its five circles – Mumbai and UP (E). Idea meanwhile has not seen any revenue share loss in its top five circles, instead gaining 50-810bps revenue market share.

Expanding this beyond the top five circles, Bharti has lost revenue share in 16/22 circles; Vodafone on the other hand has lost in 5/22 circles while Idea has managed to improve market share across all of its circles.

Given the continued losses, we believe the company is unlikely to let this trend persist for too long and therefore chances of further hikes look modest.

Figure 2. Revenue market share and trends since 2QFY09 (last 12 quarters)

	BSNL		Idea		Vodafone		Bharti		Aircel		Tata Tele		RCOM		Uninor	
	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend	Mkt share	Trend
AP	9.4%	1.1%	17.3%	0.5%	10.8%	-2.6%	39.5%	1.7%	1.6%	1.6%	11.2%	0.0%	7.3%	-5.4%	2.3%	2.3%
Assam	10.8%	-13.7%	1.9%	1.9%	13.1%	12.5%	31.0%	0.2%	23.7%	0.4%	2.5%	2.5%	16.7%	-4.0%	0.0%	0.0%
Bihar	6.2%	-5.9%	8.9%	8.9%	11.4%	11.4%	43.3%	-6.1%	4.3%	1.2%	7.6%	-0.9%	12.1%	-14.8%	3.5%	3.5%
Kolkata	4.7%	-2.5%	3.3%	3.3%	31.0%	0.9%	26.7%	-3.7%	4.1%	3.4%	11.5%	1.0%	12.5%	-8.5%	3.6%	3.6%
Gujarat	5.4%	-1.9%	17.6%	1.4%	39.1%	1.3%	17.4%	-2.4%	NA	NA	7.8%	1.5%	7.6%	-5.0%	3.4%	3.4%
Haryana	10.2%	-6.5%	21.8%	3.3%	27.9%	5.2%	17.7%	-2.9%	1.0%	1.0%	13.2%	2.2%	6.1%	-4.4%	0.0%	0.0%
HP	15.4%	-2.5%	7.6%	2.7%	8.2%	8.2%	40.4%	-7.5%	6.7%	5.5%	4.2%	-0.9%	14.4%	-8.7%	0.0%	0.0%
J&K	15.6%	-6.0%	2.2%	2.2%	8.5%	8.5%	38.5%	-29.3%	27.0%	16.5%	3.1%	3.1%	5.1%	5.0%	0.0%	0.0%
Karnataka	5.9%	-3.1%	8.6%	2.3%	14.5%	-1.5%	45.8%	-4.8%	1.5%	1.5%	12.0%	4.6%	7.8%	-2.8%	1.3%	1.3%
Kerala	14.7%	-1.2%	32.0%	8.1%	22.5%	5.0%	16.5%	-3.5%	2.1%	2.1%	6.0%	-0.7%	4.4%	-11.7%	0.6%	0.6%
MP	8.2%	-3.4%	30.9%	2.4%	6.1%	6.1%	25.9%	-7.3%	0.8%	0.8%	8.9%	4.4%	18.1%	-4.0%	0.0%	0.0%
Mah	6.6%	-4.0%	28.1%	2.0%	23.3%	6.4%	19.8%	-4.0%	0.9%	0.9%	10.4%	-0.9%	7.4%	-4.0%	3.0%	3.0%
NE	13.7%	-12.4%	2.5%	2.5%	11.5%	10.9%	36.6%	1.0%	25.5%	1.1%	3.0%	3.0%	7.0%	-6.4%	0.0%	0.0%
Orissa	16.0%	-6.3%	3.2%	3.2%	12.2%	11.8%	36.0%	-7.3%	7.4%	2.9%	8.6%	1.3%	12.7%	-9.5%	2.5%	2.5%
Punjab	7.6%	-6.3%	19.6%	2.0%	17.8%	3.5%	36.3%	0.3%	1.6%	1.6%	8.4%	1.8%	5.2%	-2.1%	0.0%	0.0%
Rajasthan	7.5%	-8.9%	10.3%	5.0%	22.4%	1.8%	42.4%	2.9%	2.2%	2.2%	6.3%	-0.6%	5.6%	-3.6%	0.0%	0.0%
TN	7.8%	-3.5%	2.2%	2.2%	23.0%	4.3%	31.2%	-0.9%	21.1%	-1.3%	5.4%	0.6%	6.2%	-4.4%	1.0%	1.0%
UP (E)	11.0%	-7.3%	11.8%	5.1%	28.6%	-0.7%	27.8%	0.7%	2.0%	2.0%	4.8%	0.6%	8.2%	-6.1%	5.4%	5.4%
UP (W)	7.7%	-5.4%	28.1%	3.6%	22.7%	-0.7%	16.9%	-0.2%	2.5%	2.5%	8.1%	0.3%	8.4%	-5.6%	5.1%	5.1%
WB	6.7%	-6.5%	3.3%	3.3%	35.8%	0.4%	25.7%	-1.7%	4.1%	1.3%	5.1%	-0.3%	10.9%	-4.9%	4.7%	4.7%
Delhi	4.9%	1.0%	10.3%	0.5%	27.1%	5.0%	35.2%	-4.0%	2.4%	2.4%	7.7%	-4.6%	11.2%	-1.4%	0.0%	0.0%
Mumbai	2.7%	-3.4%	7.2%	6.9%	31.1%	-1.4%	18.7%	-2.4%	1.9%	1.9%	13.6%	-0.7%	12.9%	-4.2%	1.8%	1.8%

Source: Citi Investment Research and Analysis

- **Data/3G**

3G and EDGE data rates priced at similar level in many developed countries; eliminates pricing arbitrage

– Still early days but ramp has started (albeit on a low base). One interesting observation was that 2.5G (EDGE) data uptake has started to gain traction given the increased subscriber awareness due to heavy 3G promotion. One key reason behind this could be the disparity between per MB rates on EDGE vs 3G. The company has been trying to wean away subscribers from 3G by reducing the perceived gap i.e. they first slashed 3G rates by 50% and followed it up by increasing EDGE rates by 100%. The operators will need to further reduce this arbitrage to help 3G gain traction, in our opinion. Interesting to note that, in developed markets, there is no disparity between EDGE and 3G-based data pricing.

– 3G active users at 27%

– Sub awareness of benefit from 3G remains key to the success

– 100% m-o-m increase in dongle sales

Feature phone with browser capability will be key for data ramp-up

– **Handsets** – Feature phone and not smartphone will drive 3G penetration. Feature phones with browser capability will be the key to success. Smartphones will likely take a while to take off due to pricing issues. The company claims that in the best case, smartphone sales won't exceed 10% of the overall handset sales in the next two years.

– **Applications** - No dearth of applications at least for the target audience in the initial stage of 3G.

– The internet penetration is already decent with 112m users - 88m in the top 25 cities. The top eight cities account for 40% of the total internet usage. The challenge is to try and shift some of these to 3G.

– **Two factors to watch**

1. Casual usage (i.e. no monthly commitment) was relatively high in the initial stage, which wilted away as time passed. The company is now focusing on encouraging monthly bill commitment for data. The cut in data rates should help encourage it but caused a short-term blip in data revenues in 2Q.

2. Bill shocks – 25-35% of the data bills get challenged worldwide. The company is investing in technology to prevent bill shocks by guaranteeing upper limit of the bill which can be pre-decided by the subscriber.

– **Spectrum** - Currently allocated one carriage (5Mhz), which could lead to capacity issues in the urban areas. Longer term, an additional two carriages would be needed.

Figure 3. Bharti (3G)

Rs	MB	Rs/MB
100	200	0.50
200	500	0.40
450	1,200	0.38
750	4,000	0.19

Source: Citi Investment Research and Analysis

Figure 4. Vodafone (3G)

Rs	MB	Rs/MB
100	200	0.50
375	1000	0.38
650	2,000	0.33
850	3,000	0.28

Source: Citi Investment Research and Analysis

Figure 5. Bharti (EDGE)

Rs	MB	Rs/ MB
25	200	0.13
46	500	0.09
98	1,000	0.10
149	2,000	0.07

Source: Citi Investment Research and Analysis

Figure 6. Vodafone (EDGE)

Rs	MB	Rs/ MB
17	75	0.23
99	1,000	0.10
149	2,000	0.07

Source: Citi Investment Research and Analysis

- **Regulations** – Uncertainty is likely to remain given many of the issues highlighted in the draft policy are complex and unlikely to get resolved in a hurry.

- **Wireless margins**

  – Diesel price hikes have been a major drag on margins.

  – The company believes that dealer commissions are still high. The commissions should ideally be on the incremental uptake rather than first sale given high sub churn.

- **Tariffs** could rise further due to 1) high inflation and 2) continued fuel price increases.

- **Towerco** – Both Indus and Infratel are FCF positive. Indus debt currently stands at Rs80bn.

- **Africa**

  – Negotiated with all equipment vendors with network mgmt contracts awarded to Ericsson, NSN and Huawei.

  – The company has 3G network in ten of the 16 countries

  – Currency volatility and high inflation remain the key areas of concern, though inflation has so far been under control

Capex guidance unlikely to be further revised up given physical limitations of network roll-out

- The company in 2Q had increased the capex guidance to US$1.4-1.5bn, which it claims is unlikely to get revised upwards, given the physical limitations of rolling out network

- **Bangladesh -** Network interference due to migration from 1800MHz to 800MHz has been resolved. Coverage (population) currently stands at 55% and the company expects to achieve 75% by the end of Mar-12.

- **Sri Lanka -** Relatively small market and Bharti entered as the fifth operator. The growth trajectory hasn't been as steep as was previously expected. The company initially focused on delivering low-cost services but has now shifted focus towards service quality. The incumbents had entered the market ~14-15 years back, which gives Bharti an advantage of being perceived as a relatively young brand and helps capture the youth segment.

Idea – Banking on rev/min to improve returns

- **Regulatory hurdles**

Policy trying to address too many issues simultaneously; M&A norms are the most critical

  - Policy getting complicated in trying to address multiple contentious issues

  - Current proposals (of TRAI, DoT panel) unlikely to create a level playing field and risks getting embroiled in litigation - New entrants paid Rs16.5bn for a 20-year license in 2008, which will come up for renewal in 2028. In contrast, incumbents would need to start renewing their licenses starting 2014, at much higher prices (~10X spectrum price in 2008).

  - Primary focus should be on M&A - Policy changes should be introduced in a phased manner. M&A/exit norms are the most critical and should be addressed first.

Expects more exists than consolidation given complications of network assets. Idea would prefer buying spectrum from Government given "cleaner title" to that spectrum

- **Exit vs consolidation** - Exits are more likely compared to consolidation. Acquiring a telecom operator can provide a company with broadly three types of assets – (a) customers, (b) network assets and (c) spectrum. From the perspective of an existing telecom operator, none of the three would be especially attractive. Any telco would already have an existing customer base and, given the prevalence of multi-SIMs, there would be overlaps in the customer base. Network assets that are likely to be put on the block would be at least 2-3 year old 2G equipment. Since the leading operators have already completed 2G roll-outs and are now investing in 3G, the demand for old 2G equipment would be very low. Last, while spectrum is scarce and is probably the most valuable asset for any telco, ever-changing regulatory regimes make it 'safer' to purchase spectrum directly from the Govt. These arguments make the case for acquisition quite weak and imply exits by returning spectrum to the government are more probable.

  - Exits by returning spectrum would help make 2G spectrum available for auction, which could help the DoT discover the market price vs the estimated value.

- **Industry structure** - According to Idea's analysis, an operator's cash break-even is achieved at a 10% revenue-market share. It is only after this threshold that economies of scale come into play. A corollary of this is that the industry should not have more than 6-7 players in steady state. Further, for the industry to be healthy, at least 3-4 players should be able to earn reasonable returns of capital (~15% RoCE). Currently, only Bharti is able to earn returns of this magnitude. The other industry players could reach this level through (a) higher tariffs or (b) better operating leverage – through better utilization of 3G assets.

Bulk of cost efficiencies already squeezed; cost/min unlikely to come down further. Margin improvement as a result likely to come from rev/min uptick

- **Cost efficiencies** - Most of the cost efficiencies have already been squeezed. With Idea at relatively high capacity utilization, the cost/min is unlikely to come down much from the current level. As a result rev/min will need to move up to expand ROIC. The company claims a 1p increase in rev/min helps expand ROIC by 1%.

- **3G**

  – Network utilization at 10-15%

  – Business case for 3G cannot be built purely on data. As things stand now, voice is both more profitable and provides higher revenues than data. The strategy is to optimize the mix of voice and data to make most efficient use of its 3G investments.

  – Currently all 3G sites are co-located with 2G sites. Co-location costs only 15-20% of the cost of setting up a new site. Idea foresees co-location to remain around 90% even after a complete 3G roll-out.

  – Idea is in the process of fiberization of its back haul. This is being done in sync with 3G roll-outs.

  – 3G capex for FY12E is estimated at Rs25bn, out of which Rs15bn has been spent in 1H.

RCOM – Positive on data

- **Regulatory landscape**

  – Two key issues – (a) contracted spectrum is 6.2MHz (not 4.4MHz) and (b) charges for excess spectrum are more or less decided

  – Uncertainty on re-farming and 3G roaming pacts

    • Operators will be made to pay higher amount for 900MHz if spectrum swap isn't possible (this is what is being built in our fair value).

    • 3G license allows for roaming but not sale of SIM cards for other operators' spectrum.

  – **License renewals** will have lesser impact on RCOM relative to incumbents given its CDMA spectrum is due for renewal in 2020 and the GSM spectrum in 2028.

Any cut in termination will help RCOM

  – **Interconnect rates** – Any reduction in termination rate will help the company as it is a net payer. We estimate a 10p cut in termination rate will help RCOM.

Figure 7. RCOM to benefit from termination cut

	RCOM	Remarks
Wireless		
Total Mins (FY13E) - mn	438,000	
Outgoing %	51%	Based on TRAI's Performance Indicator Report - Jun-11
Outgoing mins	223,380	
On-net %	45%	Based TRAI's Performance Indicator Report - Jun-11
On-net outgoing mins	100,521	
Off-net outgoing mins - (a)	122,859	
Incoming mins	214,620	
On-net incoming mins	100,521	Same as outgoing on-net mins
Off-net incoming mins - (b)	114,099	
Net off-net mins (a-b)	8,760	Off-net outgoing mins minus off-net incoming minutes
Reduction in termination (Rs)	0.1	
Net impact - (loss)/gain in Rs m	876	Loss on incoming mins offset by savings on outgoing mins
Overall (loss)/saving	**876**	
Net of license fee	**771**	
% of FY13E wireless EBITDA	**1.3%**	
% of FY13E consol EBITDA	**0.9%**	

Source: Citi Investment Research and Analysis

- **3G** – Competition in data is limited, which should support pricing. Further, after having paid heavily for spectrum, most operators also need to upgrade infrastructure (network equipment and back haul). Management believes this would be a source of competitive advantage for the company due to its extensive fiber backhaul
  - CDMA EVDO can achieve speeds similar to WCDMA (2.1GHz)
- **Why invest in both CDMA and 3G?** - Management believes that spectrum is the only "raw material" that matters in this business and not having enough spectrum could lead to market share losses in the long run. It made sense for RCOM to bid for 3G spectrum to – (a) get access to more spectrum – with spectrum de-linked from licenses, RCOM would be able to offer any service over any spectrum as long as a viable technology ecosystem exists and (b) technology proof itself.
- **Pricing** – Focused on rev market share and doesn't want traffic growth at the risk of realization.

Uninor – Second Wind?

- **Growing confidence on EBITDA BE** - Cash burn has reduced to less than Rs2bn/month and is declining by Rs100-150m every month. It was ~Rs3.5bn in the early stage of launch. The company expects this to reduce to zero in the next 13-14 months and therefore expects EBITDA BE in early CY13. It continues to maintain cash flow BE by CY15.
- **Cost rationalization -** Capex has already been rationalized. The company plans to expand coverage to two additional beyond the 13 launched (plus Delhi as and when it receives spectrum).

Pricing

Hasn't toed incumbents line on tariffs, plans to remain aggressive. Strategy has shown results with strong mins growth and reducing EBITDA losses

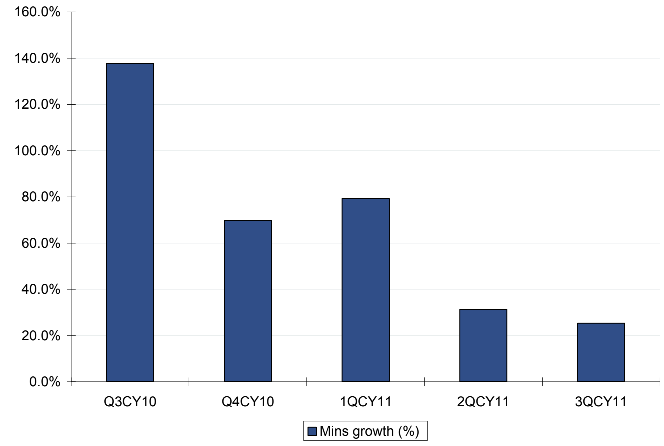
– Uninor hasn't followed the incumbents in raising tariffs and plans to be aggressive on pricing to capture market share. The company claims to be 10% lower vs incumbents on pricing and plans to maintain this discount. Moreover it will reduce discounted mins rather than take a headline tariff increase as and when incumbents raise tariffs in order to maintain the pricing gap.

– The company's aggressive strategy has started to bear results, reflected in its 2Q results which saw a 25%qoq in mins growth accompanied with lowering of cash burn. Interestingly this mins growth came despite stable rev/min. The company claims some benefit of network effect in helping this growth as sub base rises. The sustained strong mins growth has helped the company gain revenue market share. Uninor has gained 90-140bps rev share in its bigger circles in the last two quarters.

Uninor's success in grabbing market share with lower tariffs has put further hikes by the incumbents at risk

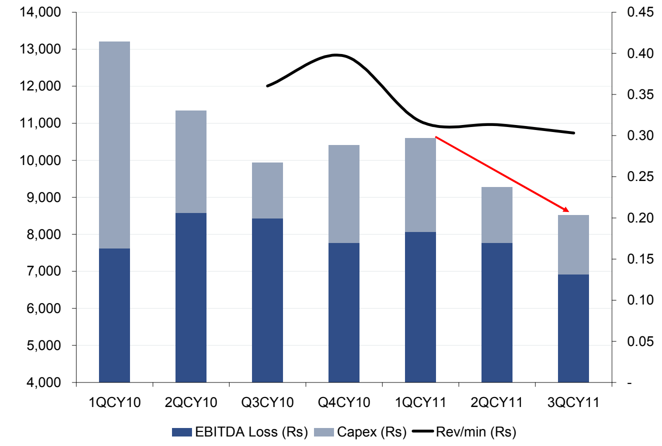
– We believe that Uninor's successful strategy of pricing below incumbents and not take a raise in tariffs has put further hikes by the incumbents at risk.

Figure 8. Mins growth (%)



Source: Citi Investment Research and Analysis

Figure 9. Strong Mins growth helps reduce cash burn; rev/min remains broadly stable

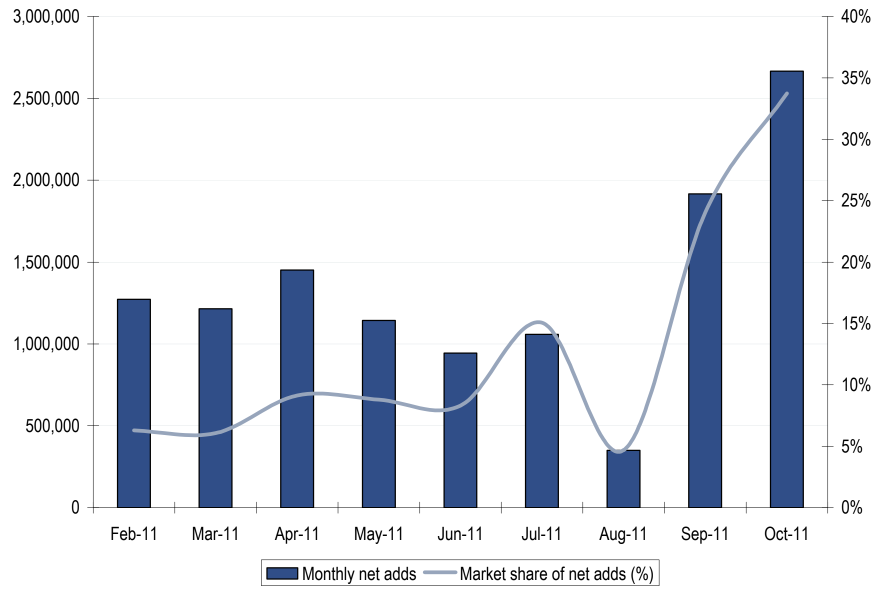


Source: Citi Investment Research and Analysis

Strong monthly net adds helps the company bulk up which should help in case it participates in sector consolidation

The gap in pricing, its aggressive marketing push and incumbents' pull-back have all helped the company register strong monthly net adds. We believe that apart from helping the company fill up the network (hence reduce cash burn), this bulking up of the subscriber base should also help it negotiate from some position of strength if it participates in the industry consolidation.

Figure 10. Uninor currently has the highest % of net adds



Source: Citi Investment Research and Analysis

- **Spectrum** - The company is facing spectrum crunch in some areas and believes that allocation of additional 1.8Mhz (totaling 6.2MHz) will be adequate for the next two to three years.
- 70% population coverage, on-net traffic is currently at 35%. Any cut in termination should help the company.
- Non-voice contribution is at 9.4% of overall revenues though this mostly constitutes SMS and caller ring-back-tunes.

Figure 11. Uninor has gained revenue share in its key circles

	Revenue market share (2QFY12)	Movement in the last 2 qrts
AP	**2.3%**	**0.9%**
Assam	0.0%	0.0%
Bihar	3.5%	1.4%
Kolkata	3.6%	1.0%
Gujarat	**3.4%**	**1.3%**
Haryana	0.0%	0.0%
HP	0.0%	0.0%
J&K	0.0%	0.0%
Karnataka	1.3%	0.5%
Kerala	0.6%	0.1%
MP	0.0%	0.0%
Maharashtra	**3.0%**	**1.4%**
NE	0.0%	0.0%
Orissa	2.5%	1.2%
Punjab	0.0%	0.0%
Rajasthan	0.0%	0.0%
TN	1.0%	0.4%
UP (E)	**5.4%**	**1.2%**
UP (W)	**5.1%**	**1.3%**
WB	4.7%	2.0%
Delhi	0.0%	0.0%
Mumbai	1.8%	0.7%

Source: Citi Investment Research and Analysis

Meeting with Industry expert on 3G/LTE

- **LTE v/s 3G**

Speed gap narrowing between 3G and LTE means both technologies will compete for similar customer needs

  - **Speed** - 3G HSPA is capable of delivering 21Mbps v/s 51Mbps on LTE. The narrowing gap between the two technologies doesn't bode too well for LTE which will need to compete with 3G services for similar customers' needs.
  - **Cost** - 3G BTS is currently 20% more expensive compared to LTE.
  - Asymmetric download for LTE is less skewed compared to 3G – download is 1.5 times upload.
- Low-cost smartphones will take time to become widely available - handset pick-up generally lags three years compared to technology adoption.
  - US$50 (similar to average current cost of a 2.5G handsets sold in India) is the key to wide-scale adoption. Huawei and ZTE have been at the forefront.
- **Towers**

Excess towers particularly in the urban areas. Cost of dismantling is more than offset by cost savings

  - The industry currently has excess towers - ~15% of the towers currently installed can potentially be dismantled without network disruption. Dismantling costs are Rs150-200k/tower. Rural tower density is ok, urban needs to be realigned.
  - Cost of upgrading tower to handle additional tenancy – Rs300-500k. This is still lower compared to the cost of installing a greenfield tower.
  - Old BTS use 1.2KW power; New BTS use ~50% less.
  - Operators want to shift to a fixed energy model given energy is the largest component of operator payment. 20-25% of diesel gets pilfered.
- Relatively easy to toggle between voice and data in the network
- Cheaper to carry voice rather than data - voice uses 32kbps
- **Success factors for LTE**
  - Low-cost android chipsets
  - Datacards featured with integrated applications
  - Applications – Revenue generation through monetization of apps should be the key, especially in the Indian context.

Towercos – Energy Not Tenancy seems to be the focus

Meeting with operator-owned towercos

Excess towers in urban areas, 50% of towers handling single tenant

- Urban areas have excess towers, which should ideally get rationalised. ~50% of the towers in urban areas handle a single tenant currently.
- **Rentals** – Ground-based tower is Rs28,000 (for two tenancies) while it is Rs22,000 in case of a RTT

- Energy costs
  - 40 liters of diesel is required daily to run a site 100% without grid power.
  - 20% of diesel is pilfered on an average
- **Towercos shifting to a fixed energy model** – Energy cost/site gets fixed (typically done at a circle level) which is then divided between the tenants depending upon their BTS vintage (older BTS use more energy).
- **License fees shouldn't impact towercos** - The Master Service Agreement (MSA) signed between the towercos and operators incorporates potential license payments/regulatory charges and will therefore be a pass-through.
- **Backhaul** – Fiber backhaul for tower connectivity isn't a critical need in the early stage of 3G - microwave link (needs line of sight) has a capacity of STM1.

Right of way for fiber is high but not prohibitive

- **Right of way** – Fiber roll-out in the urban areas is costly but not prohibitive
  - **Mumbai** – Rs7.2m/km
  - **Delhi** – Rs1.4m/km. It used to be Rs0.8m/km sometime back
  - **Surat/Ahmedabad** - ~Rs1.8m/km
  - The cost of ROW in the remaining towns/cities across India is less than Rs1m/km

Maxx Mobiles – Emphasis on feature phones

- **Company update –** Maxx Mobile is a large white-box handset vendor. The company currently has three factories with a total capacity of 88m mobile phone batteries and 50m phone chargers. Currently, mobile phone and accessory businesses make equal contribution to the company's top line. It plans to enter handset manufacturing from April 2012 and has also ventured into retailing of mobile phones with the launch of its first store in November. FY11 top line stood at Rs14.5bn.

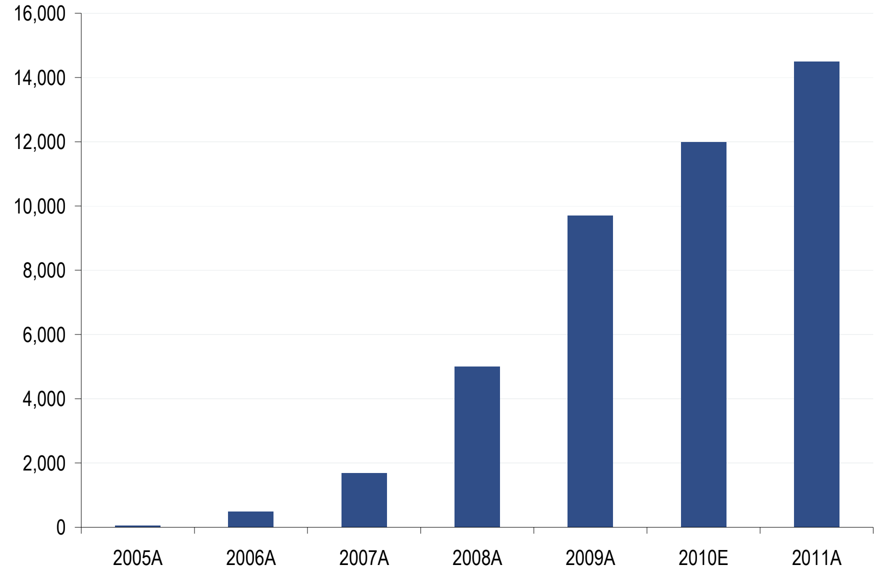
8% price hike to counter rupee depreciation; other white-box vendors too would have taken similar hikes

- **Update on mobile handset market in India** – The company recently raised handset prices by 8% to offset the impact of INR depreciation (handsets are imported). We believe other domestic phone companies may have made similar hikes. The company claims that despite a slowdown in monthly gross sub additions, it has not seen any moderation in demand for handsets. According to Maxx, the Indian mobile handset market should grow by ~20% yoy with shortening replacement cycle even as gross subscriber adds slow down.

Feature phones and not smartphones to lead data adoption; corroborated by Bharti too

- **Outlook for smartphones** – Limited demand for smartphones. Feature phone segment is seeing the maximum growth (largest contributor to company's sales). This was corroborated by Bharti which had mentioned that 3G adoption in India will be led by browser functionality in feature phones and not through lowering of smartphone prices.

Figure 12. Trends in revenues of Maxx Mobile (Rs m)



Source: Citi Investment Research and Analysis

Bharti Airtel

Valuation

Our target price of Rs452 comprises: (i) Core business value of Rs344 based on June-12E DCF; (ii) We estimate value accretion from Africa acquisition at Rs39/share; (iii) We add the towerco value (100% Infratel + 42% of Indus) at Rs93; and (iv) We reduce the potential cash outgo (Rs24) related to one-time excess spectrum charges and license renewal fees. The DCF is based on a WACC of 11.2%, a terminal growth rate of 3% and beta of 0.8. We prefer DCF as peak capex burden is behind us and the company should start to generate significant free cash flows. The domestic business DCF implies FY13E EV/EBITDA of 7.1x, P/CEPS of 8.5x and P/E of 16.9x.

Risks

They key risks to our investment thesis and target price on Bharti are: 1) business disruption through slower-than-expected volume growth following tariff hike; 2) slower turnaround at acquisition; and 3) adverse regulations (low probability in our view). We however believe that the following factors help to mitigate downside risks: 1) Bharti has a track record of profitability and execution; and 2) strong FCF generation notwithstanding the high debt following an acquisition.

IDEA Cellular

Valuation

Our target price of Rs118 is based on (i) core business value at Rs120/share based on Mar-12 DCF; plus (ii) the Indus stake valued at Rs15/share; minus (iii) Rs17 cash outgo related to one-time spectrum charges and license renewals from TRAI recommendations. The DCF is based on a WACC of 11.0%, a terminal growth rate of 3% and beta of 1.1. We prefer DCF as peak capex burden is behind us and the company should now start to generate free cash flows. The DCF implies a Mar13E EV/EBITDA value of 8.4x.

Risks

High leverage is a concern for Idea; it is however mitigated by the track record of superior execution that the management has established. The management has done an exceptional job in navigating through rough patch in the telecom sector in the past couple of years which is evident in the revenue share gains the company has made. As a result, we believe any risks arising from having a stretched B/S have reduced. Downside risks that could impede the stock from reaching our target price include: 1) Adverse regulations regulated to higher-than-expected regulatory charges (license fee renewals and excess spectrum charges) and a sharper than expected decline in traffic growth or revenue market share loss in case the competition doesn't match the tariff increases, which may also lead to a roll back.

Reliance Communications

Valuation

Our target price of Rs117 comprises (i) core business value of Rs100, based on 6.6x Sep EV/EBITDA, at a 15% discount to Bharti's implied target multiple; plus (ii) towerco value accretion of Rs25 based on long-term external tenancy of 0.5x. We believe a 15% discount to Bharti on the core business valuation is justified on account of the inherent risks of dual network and higher leverage. Our towerco net value accretion of Rs25 is based on the following assumptions: 1) Long-term tenancy of 2.15x with captive tenancy of 1.65x; 2) Capex recovery of 12%, 3) WACC of 11.3% and terminal growth rate of 3%. 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. The current 2G controversy surrounding the allotment of spectrum at allegedly below market price to the new entrants in 2008 means that there is a risk of penalties. While the chance of this occurrence is low, assuming a 50% probability of this event, the hit on RCOM would be Rs8/share which we include in our TP (based on Rs41bn for 4.4MHz based on 3G spectrum being 3x more efficient versus 2G).

Risks

We assign a High Risk rating to RCOM given that the stock is deemed to be relatively volatile by our quantitative risk-rating model (based on stock price movements in the past year) and because of its lackluster business momentum and possible penalties by the Government on 2G spectrum especially in the context of its high leverage. Key downside risks that could prevent the stock from reaching our target price include: 1) further deterioration in core business, 2) higher-than expected penalties related to GSM spectrum allotted in 2008 and 3) inability to deleverage through asset sale.

Appendix A-1

Analyst Certification

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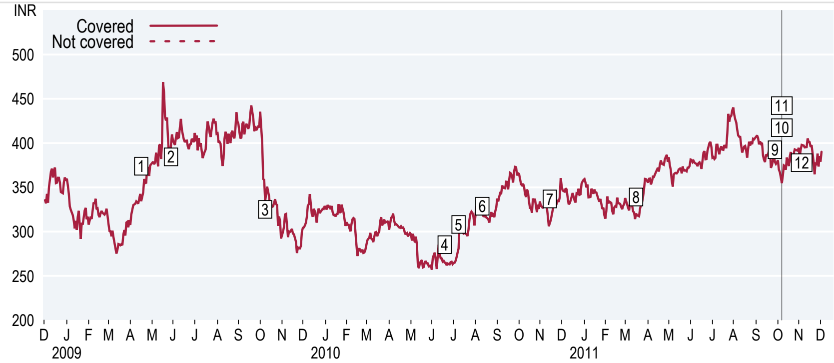
IMPORTANT DISCLOSURES

Bharti Airtel (BRTI.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



	Date	Rating	Target Price	Closing Price
1	16-Apr-09	1L	*420.00	334.38
2	28-May-09	1L	*465.00	397.60
3	8-Oct-09	*2L	*370.00	334.65
4	18-Jun-10	2L	*303.00	264.85
5	8-Jul-10	2L	*300.00	280.85
6	11-Aug-10	2L	*350.00	319.70
7	15-Nov-10	*1L	*400.00	309.50
8	16-Mar-11	1L	*415.00	320.45
9	28-Sep-11	1L	*453.00	378.75
10	7-Oct-11	Stock rating system changed		
11	7-Oct-11	*1	453.00	354.80
12	4-Nov-11	1	*452.00	397.95

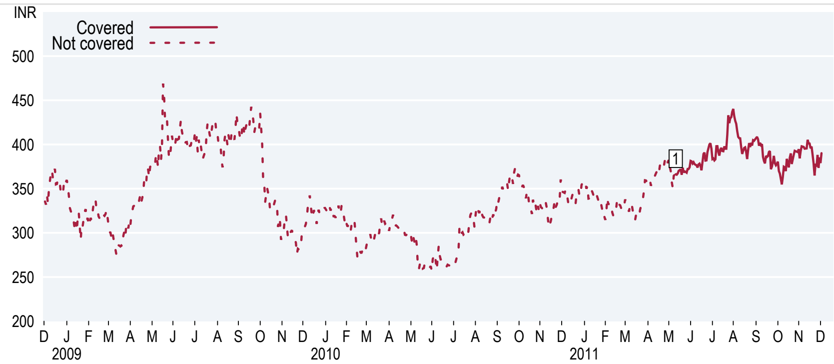
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Bharti Airtel (BRTI.BO)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



	Date	Rating	Target Price	Closing Price
1	11-May-11	*ADD MP	-	366.35

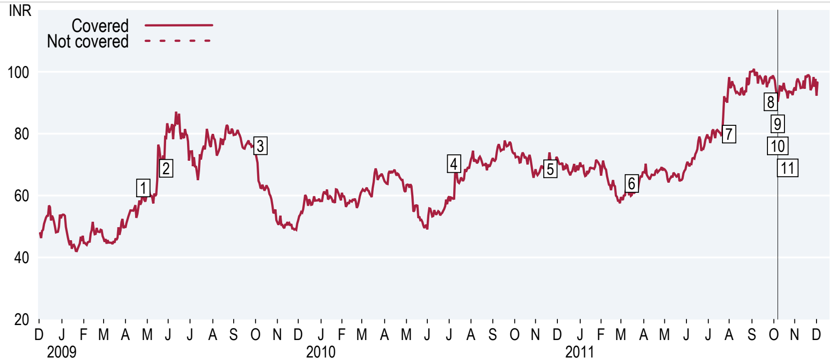
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

IDEA Cellular (IDEA.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



	Date	Rating	Target Price	Closing Price
1	26-Apr-09	*2M	*67.00	60.55
2	28-May-09	*3M	*80.00	78.65
3	8-Oct-09	3M	*55.00	62.50
4	8-Jul-10	3M	*50.00	59.00
5	22-Nov-10	3M	*72.00	71.65
6	16-Mar-11	*1M	*79.00	60.20
7	31-Jul-11	*1L	*105.00	94.35
8	28-Sep-11	1L	*120.00	98.20
9	7-Oct-11	Stock rating system changed		
10	7-Oct-11	*1	120.00	90.30
11	21-Oct-11	1	*118.00	91.40

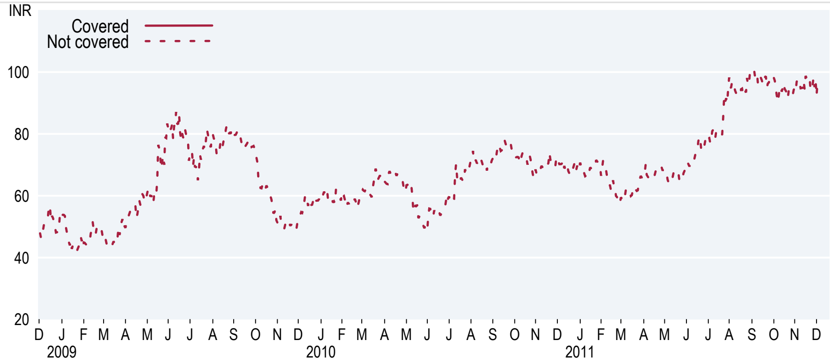
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

IDEA Cellular (IDEA.BO)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



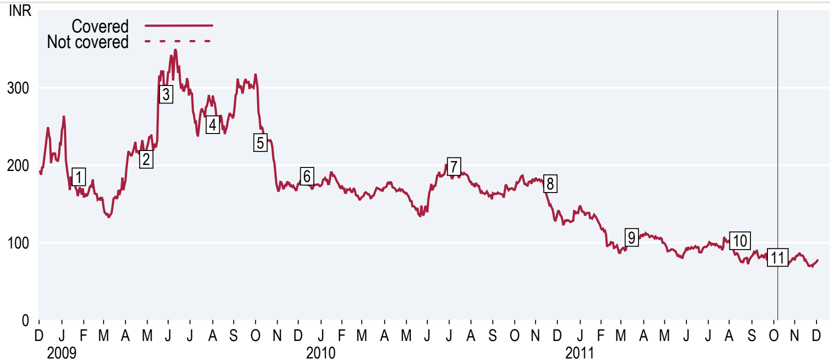
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Reliance Communications (RLCM.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



	Date	Rating	Target Price	Closing Price
1	26-Jan-09	*3H	*150.00	160.15
2	30-Apr-09	3H	*190.00	214.95
3	28-May-09	3H	*270.00	297.35
4	2-Aug-09	*2M	*310.00	275.65
5	8-Oct-09	*3M	*210.00	246.30
6	12-Dec-09	3M	*160.00	183.65
7	8-Jul-10	3M	*165.00	187.95
8	22-Nov-10	3M	*155.00	149.30
9	16-Mar-11	*1H	*127.00	102.95
10	16-Aug-11	1H	*117.00	77.40
11	7-Oct-11	Stock rating system changed		

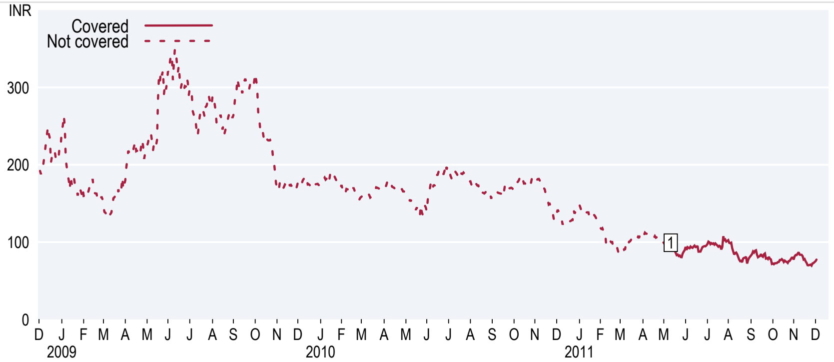
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Reliance Communications (RLCM.BO)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Gaurav Malhotra, CFA
Covered since June 18 2010



Date	Rating	Target Price	Closing Price
1 11-May-11	*ADD LP	-	91.55

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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% of companies in each rating category that are investment banking clients	45%	42%	37%	50%	43%	46%

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