Company report

Telecoms, Media & Technology
Wireless Telecoms
Equity – India

HSBC Global Research

Bharti Airtel

Overweight

Target price (INR)			**1,011.00**
Share price (INR)			**689.90**
Potential total return (%)			**46.5**

Mar	2006a	2007e	2008e
HSBC EPS	9.40	20.30	30.21
HSBC PE	73.4	34.0	22.8

Performance	1M	3M	12M
Absolute (%)	12.2	38.5	100.4
Relative^ (%)	7.6	24.5	35.1

25 January 2007

Tucker Grinnan *
Analyst
The Honkong and Shanghai Banking Corporation Limited (HK)
+852 2822 4686
tuckergrinnan@hsbc.com.hk

Rajiv Sharma *
Associate
Bangalore

*Employed by a non-US affiliate of HSBC Securities (USA) Inc, and is not registered/qualified pursuant to NYSE and/or NASD regulations.

Issuing office: Hong Kong

Towering ahead

- **Bharti reported another set of outstanding quarterly numbers highlighting rising market share, rising margins, and bullish management guidance on capex and towers**
- **We are revising our numbers to reflect a more aggressive rural wireless roll-over, higher than estimated margins on broadband/enterprise, and a tower spin-off**
- **Raising our FY07-09e earnings by an average of 18%, our target price to INR1,011, and retain our Overweight rating**

Executing at the margins

In our view, Bharti Airtel is the best telecom operator in one of the best telecom markets in the world and we believe it is poised to strengthen its position. Bharti reported an outstanding set of 3Q FY07 results, with net income up 30% q-o-q and 123% y-o-y. The group's EBITDA margin continued to expand (up 380 basis points y-o-y), with the primary driver being expanding margins in the wireline-enterprise services units. Management remains focused on maximizing shareholder value, while pursuing new opportunities in rural wireless, direct to home (DTH) satellite TV, and the tower infrastructure business.

Underestimating growth

We believe Bharti is on a roll; it has consistently beat consensus earnings expectations from the analyst community. We upgrade our forecasts again to reflect higher capex, higher rural wireless market share, slower broadband-fixed line growth with higher margins, and faster earnings growth than we had estimated. In conjunction with the company specific changes, we have upgraded our India country forecasts to reflect the capex savings associated with infrastructure sharing, and the government's plan to subsidise the construction of 8,000 towers in rural areas.

Valuation & risks

We are raising our FY07-08 earnings by 18%, and are now c4% above consensus. We are also incorporating the asset revaluation impact of the creation of a separate towers business for the first time. We raise our price target to INR1,011, and retain our Overweight rating. The principal downside risks to Bharti, in our view, are a sustained de-rating of the Indian equities market or a sharp deterioration in the returns associated with rural wireless.

Index^	BOMBAY SE IDX
Index level	14,041.24
RIC	BRTI.BO
Bloomberg	BHARTI IN

Source: HSBC

Enterprise value (INRm)	1,359,421
Free float (%)	31.8
Market cap (USDm)	29,567
Market cap (INRm)	1,307,891

Source: HSBC

Financials & valuation

Financial statements

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Profit & loss summary (INRm)				
Revenue	116,633	186,935	258,100	337,174
EBITDA	43,600	74,532	107,068	144,221
Depreciation & amortisation	-15,860	-25,521	-35,864	-50,136
Operating profit/EBIT	27,740	49,011	71,205	94,085
Net interest	-2,432	-3,326	-4,368	-5,567
PBT	25,572	47,638	68,207	89,418
HSBC PBT	26,896	47,207	68,050	89,489
Taxation	-2,736	-6,531	-10,528	-13,845
Net profit	22,582	40,824	57,396	75,291
HSBC net profit	17,766	38,470	57,239	75,361
Cash flow summary (INRm)				
Cash flow from operations	54,213	60,762	103,296	135,709
Capex	-63,338	-100,765	-118,281	-83,123
Cash flow from investment	-63,371	-100,760	-118,281	-83,123
Dividends	0	0	-18,950	-18,950
Change in net debt	740	9,790	14,985	-33,636
FCF equity	-25,934	-34,410	-20,352	48,370
Balance sheet summary (INRm)				
Intangible fixed assets	41,458	40,924	39,711	38,741
Tangible fixed assets	142,397	220,715	304,346	338,303
Current assets	32,733	37,764	41,051	51,428
Cash & others	5,862	5,237	5,237	11,950
Total assets	217,280	300,147	385,852	429,216
Operating liabilities	65,638	96,821	128,812	145,319
Gross debt	47,395	56,561	71,546	44,622
Net debt	41,533	51,323	66,309	32,672
Shareholders funds	91,893	133,577	172,023	225,521
Invested capital	145,088	197,345	251,059	271,203

Ratio, growth and per share analysis

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Y-o-y % change				
Revenue	45.7	60.3	38.1	30.6
EBITDA	44.7	70.9	43.7	34.7
Operating profit	52.5	76.7	45.3	32.1
PBT	54.0	86.3	43.2	31.1
HSBC EPS	46.4	116.0	48.8	31.7
Ratios (%)				
Revenue/IC (x)	0.9	1.1	1.2	1.3
ROIC	15.3	24.2	27.3	30.8
ROE	23.2	34.1	37.5	37.9
ROA	12.9	17.2	17.9	19.7
EBITDA margin	37.4	39.9	41.5	42.8
Operating profit margin	23.8	26.2	27.6	27.9
EBITDA/net interest (x)	17.9	22.4	24.5	25.9
Net debt/equity	44.7	38.0	38.1	14.3
Net debt/EBITDA (x)	1.0	0.7	0.6	0.2
CF from operations/net debt	130.5	118.4	155.8	415.4
Per share data (INR)				
EPS Rep (fully diluted)	11.95	21.54	30.29	39.73
HSBC EPS	9.40	20.30	30.21	39.77
DPS	0.00	0.00	10.00	11.50
NAV	48.62	70.49	90.78	119.01

DCF analysis

HSBC assumptions		DCF, comprising	
Equity risk premium	6.2	PV explicit period FCF	768,005
Risk free rate	4.9	PV fade period FCF	na
Sector beta	1.0	Terminal value	871,205
		Total value	1,639,210

Valuation data

Year to	03/2006a	03/2007e	03/2008e	03/2009e
EV/sales	11.6	7.3	5.3	4.0
EV/EBITDA	31.0	18.2	12.8	9.3
EV/IC	9.3	6.9	5.5	4.9
PE*	73.4	34.0	22.8	17.3
P/NAV	14.2	9.8	7.6	5.8
FCF yield (%)	-2.0	-2.6	-1.6	3.7
Dividend yield (%)	0.0	0.0	1.4	1.7

Note: * = Based on HSBC EPS

Issuer information

Share price (INR)	689.90	Country	India
Reuters (Equity)	BRTI.BO	Bloomberg (Equity)	BHARTI IN
		Bloomberg (Debt)	BHARTI
Market cap (INRm)	1,307,891	Enterprise value (INRm)	1359421
No of shares (m)	1,895	Free float (%)	31.8
Analyst	Tucker Grinnan	Contact details	852 2822 4686

Note: price at close of 23 Jan 2007

Summary

- Bharti's excellent 3Q results confirm our investment thesis of rising market share, expanding operating margins, and strong ROE/RoIC in an explosive growth market
- We update our model to reflect higher capex and market share in rural wireless, higher than previously estimated margins on a more targeted broadband-enterprise strategy, and a towers business spin-off
- We raise our price target by 53%, to INR1,011, to reflect both the increase in our FY07-09e earnings and asset revaluation associated with the creation of a separate towers business

Executing at the margins

Upgrading our country forecast

We are upgrading our country model forecast to reflect both short-term subscriber run rates and long-term supply-demand dynamics. GSM operators added 47m subscribers in 2006, to reach 105.4m subscribers. CDMA operators added 24m subscribers in 2006 to 41m. The principal driver for subscriber growth was a dramatic increase in network coverage and current capex plans suggest this trend will accelerate in 2007. We believe the key long-term issues for Indian wireless are the size of the addressable market, which is a function of rural disposable incomes, and the cost of rural coverage, which is a function of the level of infrastructure sharing. We emphasised the impact of rural tower sharing in raising our 2015 forecast from a 34% to 43% penetration target.

Upgrading our company forecast

We are also upgrading our company-specific earnings estimates and operational forecasts to reflect what we view as Bharti's outstanding market momentum, and management execution. We have upgraded our market share forecast from 24% in FY12e to 24.6%, which compounds the impact of an upgraded country forecast. Bharti will be the first private operator in India to make a major push in the rural markets and we believe it is well-placed to attack state-owned incumbent carrier BSNL. We are adjusting our corporate data and broadband business to reflect slower top-line growth, but much better margins than we had earlier estimated. We upgrade our FY07-08 earnings estimates by c18%, but we expect consensus numbers to move in tandem with our estimates.

Valuation and risks

We are incorporating the asset revaluation impact of the creation of a separate towers business for the first time in our analysis. We raise our target price to INR1,011 and retain our Overweight rating. The principal downside risks, in our view, to Bharti are a sustained de-rating of the Indian equities market, a sharp deterioration in the returns associated with rural wireless or irrational M&A related subscriber land-grab price war.

Rural India calling

- We upgrade wireless penetration rates from 34% to 43% by 2015e
- Rural India focus will be the biggest themes of 2007
- We are raising our supply side estimates from 75% to 80%

Excellent performance in 2006

In terms of subscriber growth, 2006 turned to be the best ever for the Indian telecom industry. GSM operators added 47m subscribers in 2006, compared to c21m subscribers in 2005. As a result, the GSM subscriber base doubled to 105.4m from 58.5m.

CDMA grew by 24m subscribers in 2006, compared to 7m subscribers in 2005. As a result, the CDMA subscriber base doubled to 41m.

Upbeat forecast for 2007

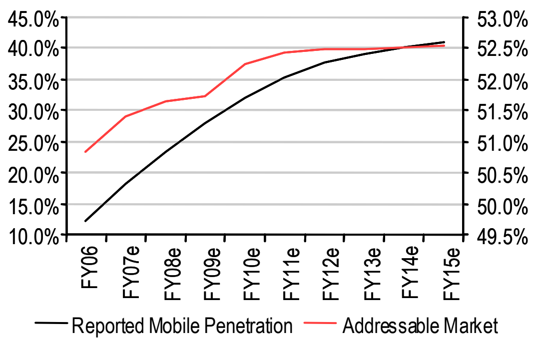
We have upgraded our subscribers' estimates for 2007. On macro level, we believe economic growth, urbanisation and increased spending on telecommunications should continue to drive mobile penetration. Falling handset prices, declining tariffs and declining capex per subscriber are the likely growth drivers. We upgrade our subscriber estimates for 2007 and beyond. As per our new estimates, we forecast mobile penetration of c43% by 2015e, compared to our earlier estimate of c34%.

Theme of 2007 is rural

We have calculated the addressable mobile market in India by segregating the population into rural and urban and then dividing it further on the basis of affordability levels of different income groups.

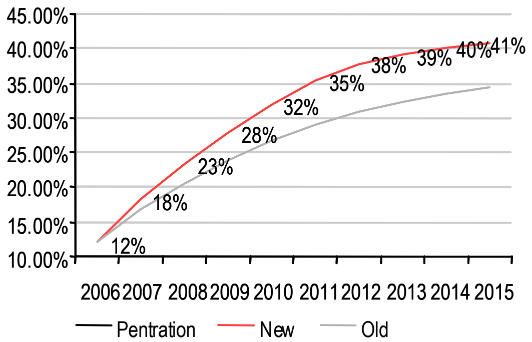
We believe government support, via Universal Service Obligation (USO) fund and initiatives by

Mobile penetration vs. addressable market



Source: HSBC estimates, Cellular Operator Association of India (COAI) and Association of Unified Telecom Service Providers of India (AUSPI)

Revised subscriber estimates – India



Source: HSBC estimates

operators towards infrastructure sharing, will allow operators to increase their penetration in semi-urban and rural areas. Out of the total revenue, 5% of the adjusted gross revenue (AGR) has been allocated to the USO fund for the development of rural and remote areas. The government has been in discussion with the industry regarding the extension of the USO subsidy support for shared wireless infrastructure in rural and remote areas.

USO fund for setting up 8,000 towers

In a recent move, the Department of Telecommunications (DoT) invited bids from all telecom operators and 22 stand-alone tower companies for setting up c8, 000 telecom towers across the country, at an estimated cost of cUSD900m. The government will provide the capital to set up these towers from the Universal Service Obligation fund (USOF) through a bidding process. This project would cover just over 212,000 villages, where neither fixed-line nor mobile services are available currently. As per the tender, stand-alone tower or infrastructure companies can bid only for passive infrastructure components (land, towers, generators and power supply and associated civil and electrical works), while service providers can bid for both passive and active components (BTS, antennae and backhaul infrastructure such as optic cable fibre). Successful bidders would be required to complete 50% of the project within eight months and the balance in the subsequent four months. This infrastructure must be shared by a minimum of three operators.

Raising our supply side estimates

We believe that shared infrastructure, with USO subsidy support, would ensure a faster roll-out of mobile networks in a cost-effective manner, besides delivering affordability and offering choice to customers. Further, Bharti in its Q3 earnings call provided a capex guidance of USD2.5bn for FY08. We believe a large part of this capex will be allocated to semi-urban and rural areas. Further, the recent focus on infrastructure sharing will also go a large extent allow operators to develop suitable business models to address the burgeoning demand. On the basis of this, we upgrade our supply side estimates from 75% to 80%, suggesting that operators will be able to reach profitably c80% of the population.

Upgrading our demand potential

In computing our demand potential of the Indian market, we have considered the age group of 15-64 years of urban population and 25-64 years of rural population. We believe that the continuing economic growth and rising income levels would have a positive impact on the rural demand in the country. Based on these changes in our assumptions, which indicate that now c50% of the population in the age group of 15-24 in rural India would also form part of the Indian wireless market, we increase the addressable market for our estimates.

Industry factors to help lower entry point

We believe that falling handset prices and declining tariffs will bring down the entry barrier for first-time mobile users. We estimate entry level handset prices at cUSD18-20 and expect it to aid subscriber growth in the future. In our addressable market model, we have assumed the minimum annual income per person for affording a GSM mobile at INR45, 000 (cUSD1000) by 2015e. The percentage of monthly income spent on owning a mobile has been assumed at 3.25%.

Robust net additions in 2006 support our view

Net additions in 2006 crossed the 6m mark, and support our view of sustained performance in 2007e and beyond. The robust net additions in 2006 have reflected excellent execution skills from Indian telcos overall. We believe the 2006 success can also be attributed to the success of lifetime prepaid plans, introduced in late-December 2005. Lifetime prepaid plans were launched in December by Bharti and later adopted and rolled out by most operators in India. With these plans, subscribers can do away with regular recharging, as they are valid for six months. As per a recent report by the Telecom Regulatory Authority of India (TRAI), lifetime plans accounted for c15% of total mobile subscribers and c28% of total net additions in 6M06. Despite having six-month validity, 72% of lifetime subscribers recharge every month. Notably, these plans exhibited lower than average ARPU of c17%. However, these plans scored better than average on revenue per minute, which was c5% higher than average. We believe, the very fact that c51% of lifetime prepaid plan subscribers are first-time mobile users suggests that they were successful in grabbing the un-captured market at the entry level. We believe economy drivers with good execution skills and innovative approach will go a long way in achieving robust subscriber growth.

Revised wireless estimates

India experienced real GDP growth rate of c8.5% in FY06. During the same period, industry and service sectors grew 8.8% and 10.1%, respectively, while agriculture grew 3.9%. The Indian economy has been witnessing an increase in purchasing power of consumers. Over the past ten years, disposable income has risen by CAGR of c10%. The robust subscriber growth in the Indian wireless space in 2006 reflects strong domestic consumption in India.

As such, we have revised our wireless estimates, which now suggest a wireless telecom penetration of c43% by 2015e, compared to c34% estimated earlier. Our revised mobile subscriber numbers are c26% than our earlier estimates. We expect the mobile subscriber base to grow at a CAGR of c13% from 2007e to 2015e.

Revised wireless estimates – India (million people)

Particulars	2007e	2008e	2009e	2010e	2011e	2012e	2013e	2014e	2015e
Mobile subscribers									
New	214	282	345	404	456	496	524	546	566
Old	194	243	286	324	357	385	409	430	448
Change	10%	16%	21%	25%	28%	29%	28%	27%	26%
Net additions									
New	74	68	62	60	51	40	28	22	19
Old	56	49	43	38	33	28	23	21	19
Change	32%	38%	46%	58%	56%	41%	20%	7%	4%
Penetration									
New	18%	24%	29%	33%	37%	40%	41%	42%	43%
Old	17%	21%	24%	27%	29%	31%	32%	33%	34%
Change	10%	16%	20%	25%	28%	29%	28%	27%	26%

Source: HSCB Estimates

Bharti Airtel

- We raise our Bharti market share estimates on the basis of robust FY08 capex guidance and associated first-mover advantages
- Yield improvement strategy will suggest higher margins for the broadband business
- Maintain Overweight rating and raise our target price to INR1,011, keeping it as our top Indian telco pick

Solid execution

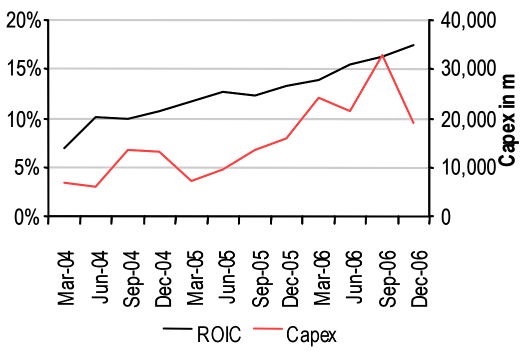
We revised our subscriber estimates for Bharti, based on the changes to our overall estimates for the Indian wireless sector. Bharti's subscriber base grew c84% in 2006, and market share improved by c180bp to 21.8% by end-2006. Bharti, with total net additions of 16m subscribers, accounted for 22% of the total wireless net additions, including both GSM and CDMA.

Q3 Takeaways

- Capex guidance for FY07 at USD2.1bn and FY08 at USD 2.5bn.
- Bharti expected to enter the DTH segment via its subsidiary Bharti Tele-media Ltd
- Bharti announced that it would form a separate tower company, which would be initially a 100% subsidiary of Bharti Airtel and would be known as Bharti Infratel Limited.
- Bharti announced the acquisition of i2i in an attempt to boost its enterprise services business. Bharti suggested the acquisition price of USD100m for the undersea cable.
- Mobile ARPU decline by 3% on a sequential basis and c9% on y-o-y basis

FY08 capex USD2.5bn suggest higher than estimated market share

Bharti ROIC vs. capex



Source: HSBC Estimates

We believe the higher than estimated capex numbers for FY08e clearly emphasise that Bharti is expected to continue with its plan of gaining quick market share with its first mover advantage. Bharti's success in the 'C' circle reflects how Bharti with its first-mover advantage has quickly grabbed the high ARPU customers along with a high market share. We believe a large part of the FY08 capex is allocated to increasing coverage in rural areas. Because of being geographically scattered, the capex requirement in rural areas is higher than it is in urban. Further as spectrum continues to be an issue, operators would have to invest continuously in capacity sites to minimise any loss in subscriber growth because of spectrum scarcity. The overall capex for FY08e could be even higher for Bharti than announced, as the guidance from the company does not include any potential capex of DTH business and international expansion.

On the basis of revised capex guidance, first-mover advantages and strong execution skills in the past, we have upgraded our market share assumptions for Bharti from 24% in FY12e to 24.6%.

Despite the increase in market share assumptions, we have not updated our margin estimates as we believe expansion in rural areas would not lead to any major improvement on margin in the near term.

First-mover advantage crucial

We believe the first-mover advantage is the key for rural markets. The churning of customers from the competition would not be a very lucrative opportunity as the ARPU would be very low in these geographies. We believe now the India wireless battlefield will move from urban markets to rural India. We believe first-mover advantage offers a fair deal to Bharti as the only competitor Bharti faces in these markets is BSNL. There has been evidence in the past that Bharti has the ability to displace BSNL from its market leadership position in rural areas. In circles like Bihar and Orissa, Bharti has been able to displace and outperform BSNL.

Separate tower business

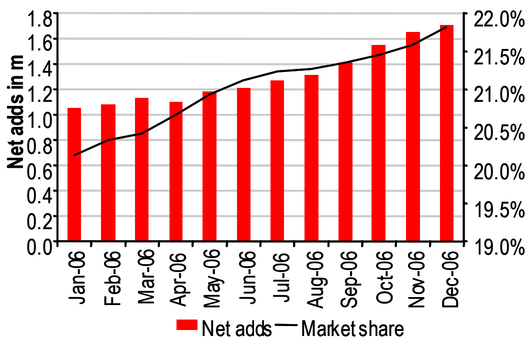
We believe Bharti will pursue a land grab strategy in 2007 and early 2008 to increase its market share. We believe Bharti faces a challenge from RCOM's (Reliance Communications – Not Rated) foray in the GSM segment. However, as spectrum is not available with RCOM, Bharti is increasing its pace to quickly grab quick incremental market share. Further going forward Bharti is also creating opportunities to monetise the investment in network infrastructure. We believe a high capex in FY08, despite the spinoff of its tower business, clearly suggests that Bharti would like to gain significantly from the investments it makes in increasing coverage. Once that coverage is captured, it would be monetizing these assets. We believe that forming the subsidiary is a first step towards monetising the assets.

Broadband and fixed line businesses

Notably, Bharti has not increased its coverage of broadband services and continues to focus on select markets. It is pursuing a strategy to increase yield per subscriber in these markets. Bharti announced that it would be launching IPTV by the end of the next quarter. These services will be restricted only in the current geographies where Bharti has investment in copper lines. We believe that this yield improvement strategy allows the company to improve its margins. Hence, we have increased our margin estimates for the broadband segment from 26% in FY12e to 32.4%. The company has not expanded its broadband coverage beyond 94 cities in the last six months and a hence we are cautious on the revenue growth side. So we cut our FY12e revenue estimates by c6% vis-à-vis our earlier estimates.

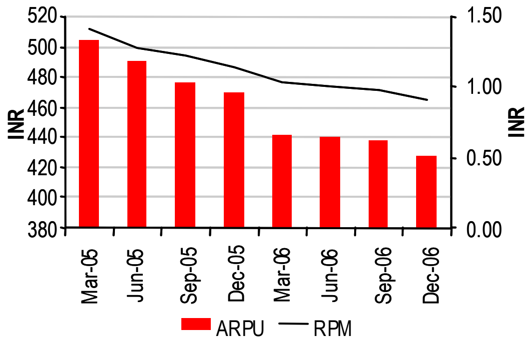
However, in order to capture growth in areas where it does not have the infrastructure to roll-out IPTV, it will be pushing its DTH services. We believe the gradual rollout of Conditional Access is likely to provide opportunities for DTH and IPTV services providers. We have not factored any possible revenue upside from the DTH business.

Bharti net additions and market share



Source: Company data and HSBC

Bharti ARPU and RPM



Source: Company data and HSBC
RPM=revenue per minute

Enterprise and Carrier Services

We are optimistic on the data and the corporate segment in India, given the growing opportunities from the service sector.

We believe the acquisition of the i2i cable will allow the company to improve margins in the medium term.

Equity partners

In our 1 November 2006 update on Bharti, *Pricing the Long-Term Growth, Raising the Target Price*, we mentioned a possible M&A catalyst as another factor that might have an impact on the potential re-rating of the stock, as Vodafone and Singtel may look to increase their stakes. As reported in *Economic Times*, with Hutchinson Essar, the India business of Hutchison Telecommunications International Limited (HTIL) being available for purchase, Vodafone, however, might look to sell its 9.9% stake in Bharti. Further, press reports have also suggested that Singtel might be willing to increase its stake in Bharti, if it were offered appropriate terms and conditions.

International expansion

As part of its international expansion, Bharti will be providing 2G and 3G services in Sri Lanka. Bharti also announced that it would look for similar opportunities in other SAARC countries. However, we believe that opportunities in India are exciting and focussing on domestic operations would be beneficial for the company in the long term. The experience of other GEM wireless operators, such as Millicom International Cellular (MIC) (NR) and HTIL (Underweight), highlights the enormous operational/regulatory/partner challenges in Africa and the Middle East. We believe investors would be best served by Indian telcos focused on India and are concerned that a revitalised international expansion strategy would be value destructive for minority shareholders of Bharti.

Roaming revenues

In a recent move, TRAI has slashed the roaming tariffs by 56% and also scrapped rental charges for roaming rentals. Given the company does not disclose segmental breakup of revenue, our understanding of the overall impact of this on Bharti is limited, to that extent. However, we believe a pick-up in roaming usage is likely and hence the slashing of roaming tariff may not have a major impact.

What has changed?

Bharti segmental estimates – new vs. old

	FY06	FY07e	FY08e	FY09e	FY10e	FY11e	FY12e
Subscriber							
Bharti market share= New	21.9%	22.7%	23.3%	23.7%	24.0%	24.3%	24.6%
Bharti market share - Old	21.9%	22.5%	23.1%	23.5%	23.7%	23.9%	24.0%
Total business							
Revenue-New	116,633	186,935	258,100	337,174	408,958	478,806	543,073
Revenue-Old	116,633	186,385	244,035	301,102	353,093	400,914	444,921
Change	0%	0%	6%	12%	16%	19%	22%
EBITDA-New	43,600	74,532	107,068	144,221	177,556	210,621	241,033
EBITDA-Old	43,600	72,510	95,571	122,843	147,354	169,885	190,585
Change	0%	3%	12%	17%	20%	24%	26%
EBITDA margins-New	37.4%	39.9%	41.5%	42.8%	43.4%	44.0%	44.4%
EBITDA margins-Old	37.4%	38.9%	39.2%	40.8%	41.7%	42.4%	42.8%
EPS -New	12.0	21.5	30.3	39.7	51.5	62.5	72.1
EPS-Earlier	12.0	19.6	24.5	33.2	40.9	47.9	54.3
Change	0%	10%	23%	20%	26%	30%	33%
Capex-New	63,338	100,765	118,281	83,123	85,784	93,943	93,292
Capex -Earlier	63,338	94,296	74,693	72,743	70,794	71,873	72,554
Change	0%	7%	58%	14%	21%	31%	29%
Mobile segment							
Mobile subs-New	19,579	35,596	54,405	70,854	86,613	102,193	115,488
Mobile Subs-Old	19,579	34,595	47,881	59,849	70,162	79,566	87,710
Change	0%	3%	14%	18%	23%	28%	32%
Revenues-New	82,392	141,492	203,277	273,729	337,430	399,285	455,990
Revenues-Old	82,392	140,323	189,264	239,705	285,109	326,110	363,393
Change	0%	1%	7%	14%	18%	22%	25%
EBITDA- Margins new	36.1%	37.3%	38.0%	39.6%	40.6%	41.1%	41.5%
EBITDA- Margins old	36.1%	37.2%	38.0%	39.6%	40.6%	41.1%	41.5%
Capex-New	41,594	84,744	100,714	65,720	68,518	76,267	75,210
Capex-Old	41,594	72,047	57,223	55,917	54,358	55,336	55,852
Change	0%	18%	76%	18%	26%	38%	35%
Fixed segment & BB							
Revenues-New	15,016	24,076	32,969	40,382	47,768	55,078	61,911
Revenues-Old	15,016	25,547	34,984	42,851	50,688	58,445	65,696
Change	0%	-6%	-6%	-6%	-6%	-6%	-6%
EBITDA margins New	24.5%	24.1%	35.0%	35.0%	33.0%	32.7%	32.4%
EBITDA margins Old	24.5%	20.4%	22.0%	24.5%	25.1%	25.5%	26.0%
Capex-New	13,012	9,112	9,561	9,434	9,207	8,984	8,769
Capex-Old	13,012	15,746	10,146	10,011	9,770	9,534	9,305
Change	0%	-42%	-6%	-6%	-6%	-6%	-6%
Enterprise services							
Revenues-New	31,705	43,669	55,162	68,235	80,108	91,906	103,071
Revenues-Old	31,705	42,734	50,287	57,747	64,635	71,313	77,868
Change	0%	2%	10%	18%	24%	29%	32%
EBITDA margins- New	36%	41%	38%	37%	36%	36%	36%
EBITDA margins -Old	36%	40%	37%	36%	35%	35%	35%
Capex-New	8,705	11,103	8,007	7,969	8,058	8,691	9,313
Capex-Old	8,705	8,705	8,705	8,705	8,705	8,705	8,705
Change	0%	28%	-8%	-8%	-7%	0%	7%

Source: HSBC estimates

Tower companies

- Bharti-Aritel announced to spinning off of its towers into a separate tower company
- Growth in MOU and spectrum scarcity are positives for tower companies
- The value of tower business with 34,000 towers assumed at USD 5.2bn

Hiving off rationale

Bharti announced during its Q3 earnings call that it would be hiving off its c34,000 towers into a separate company which would be a 100% subsidiary of Bharti. Another player in the wireless telecom space, Reliance Communications (RCOM, Not Rated), has announced plans to explore the creation of separate tower business and a group of private equity companies, including Texas Pacific Group, Blackstone, and Temasek as potential partners. There are press reports that HTIL is also exploring creation of a separate towers unit; its local parent Essar has already created a separate tower company. Recently, *Economic Times* also reported that Tata TeleServices was considering hiving off its c5600 towers into a separate entity. In this context, Bharti's move to create a tower business is part of the broader trend in the Indian market to try and monetise tower assets. It could have an impact on sector-wide asset value.

Towers constitute the most significant assets of the wireless operators. However, the current format of business model does not allow telcos to monetize their towers to the fullest possible extent. We believe hiving off towers allows service providers to focus on the branding and marketing side of the business; managing the towers and associated faculties becomes the job of the separately-formed tower company. Further by hiving off towers from their balance sheets, the telcos move to an asset light business model approach.

We believe the spin off allows the companies to unlock value in their assets as the separate tower entities can earn additional revenue streams and improve the overall cash flows.

Infra-sharing unlimited

Infrastructure sharing in the Indian wireless context will be a key value driver for subscriber growth and driving penetration. However the current format of infrastructure sharing is limited in its scope, with most of the deals being bi-lateral in nature. The current format of infrastructure sharing is largely in the nature of a barter system and hence restricts the sharing of towers between two large operators only. We believe the tower company as a separate entity has large flexibility to go beyond the unilateral deals and we could see the industry moving to a scenario where towers are shared among more than two operators. We believe this allows the operators to reduce their capex burdens and bridge the supply side gaps profitably to reach remote semi-urban and rural areas. Telecom operators would continue to invest in the electronic capex which forms c40% of the total network capex.

Indian structure: similarities to the US

India shares certain similarities with the US, where infra-sharing has been a large success. In the US, tower businesses are managed by separately-formed tower companies and the telcos primarily focus on branding and marketing. The Indian wireless market has certain similarities with the US – these include a large number of players, growing minutes of usage (MOUs), the necessity to invest in rural and semi-urban areas, spectrum scarcity, and pricing pressure.

Business models of tower companies

The business model of US tower companies is to lease space on their towers to wireless service providers. Usually, these tower companies construct tower shelters, diesel generation sites, guard rooms, and other civil constructions. They bear the entire capex burden. These companies are also responsible for the daily maintenance activities such as power, security services, and ensuring redundancy/backup services. However, in India, the first stage will begin with tower companies first buying the assets from telcos, as currently telcos own the towers. We believe the formation of separate tower companies will facilitate the process for the tower companies. Press reports in the *Economic Times* have suggested that US based tower companies, such as American Towers and Crown Castle, are planning to explore opportunities in the Indian market.

We believe once the tower companies have assets in place they will be exploring opportunities to improve the sharing ratio per tower. We believe the present competitive landscape with 6-8 operators gives large enough opportunities to the tower companies to increase the occupancy rates per tower.

Our analysis suggests that if tenants per tower improve from 1.1 to 1.2, the incremental EBITDA margin on the incremental revenue is c85%.

Drivers for tower companies

Combined MOU and subscriber growth

Key growth drivers for the tower industry as a whole would be a combination of robust subscriber growth with healthy growth in minutes. We believe the wireless operators have to invest in towers not only in new towns in which they expand their overages, but also in existing towns where usage is very high and the existing tower reaches c90% capacity utilisation. Hence if MOUs continue to rise, the wireless companies would continue to invest in towers to improve their network capacities. With tower companies coming in the picture, they would have a good business case to put up additional towers in such high usage areas. The business case is better in high usage areas which usually have more than three private operators and very competitive markets.

Spectrum constraint is positive

Another key driver for tower companies in the Indian context is the scarcity of spectrum. Operators can improve their network capacities by putting up more antennas on a single tower. However, as this requires more space, the demand for new towers gets generated.

Speed of deployment

Putting every new tower requires permission from the local authorities and other regulatory clearances such as SACFA, making the entire process cumbersome for the wireless operator. So it makes business sense for them to hire towers; this allows them to save time, as hired towers give them a ready base to work immediately.

Valuing the tower business

We make an attempt to value the separate tower company which Bharti proposes to form. According to Bharti, it has c34,000 towers currently.

We value the Bharti tower business assuming that a separate tower company is formed with 34,000 towers, which uses these assets to lease them to other operators. However we have assumed no further investment by the tower company

We have attempted to arrive at the enterprise value of Bharti's tower business assuming that Bharti has c34,000 towers. As per our estimates, the separate tower company could be valued at USD5.2bn. This suggests us a price to book value of 1.8x. Our book value is computed assuming that 60% of Bharti's projected total fixed assets form the tower assets.

Our assumptions are mentioned below:

- We have assumed that the new tower company doesn't invest further in towers
- The rental income for the tower company consists of the operating expenditure component and payment for the use of capital asset. We have calculated capital charge assuming that the tower company earns an IRR of 14%. We have further assumed that the tower company charges c60% of the computed capital charge to each operator
- We have adjusted both the opex and the rental incomes for inflation on a yearly basis
- Our cost of capital assumption is at 9.38%
- Our terminal growth assumption is at 2%

Bharti's tower business (INRm)

Particulars	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Opening Towers	34000	34,000	34,000	34,000	34,000	34,000	34,000	34,000	34,000	34,000
Tenants per tower		1.10	1.20	1.30	1.40	1.50	1.60	1.65	1.70	1.80
Rental per tower		38,531	40,072	41,675	43,342	45,076	46,879	48,754	50,704	52,732
Growth in lease rentals			4%	4%	4%	4%	4%	4%	4%	4%
Revenue in millions		17,293	19,619	22,105	24,757	27,586	30,603	32,821	35,169	38,727
Opex/ tower		24,025	24,986	25,985	27,025	28,106	29,230	30,399	31,615	32,880
Adjustment for inflation			4%	4%	4%	4%	4%	4%	4%	4%
Total costs		9,802	10,194	10,602	11,026	11,467	11,926	12,403	12,899	13,415
EBITDA in millions		7,491	9,425	11,502	13,731	16,119	18,677	20,418	22,269	25,312
EBITDA margins		43%	48%	52%	55%	58%	61%	62%	63%	65%
Operating profit		-1,749	832	3,511	6,299	9,207	12,249	14,440	16,710	20,141
Operating profit margin		-10%	4%	16%	25%	33%	40%	44%	48%	52%
EBT		-1,749	832	3,511	6,299	9,207	12,249	14,440	16,710	20,141
PAT		-1,172	557	2,352	4,220	6,169	8,207	9,675	11,196	13,495
WACC	9%									
Equity FCF		8,068	9,151	10,344	11,652	13,081	14,635	15,653	16,755	18,665
PV of FCF		8,068	8,366	8,646	8,904	9,139	9,347	9,141	8,945	9,110
Terminal value										317,308
PV of TV										154,874
EV in INR m	234,540									
EV in USD bn	5.2									

Source: HSBC estimates

HSBC

Valuation

- We value Bharti using a combined sum-of-the-parts (absolute) and PEG (relative) approach
- We factor the potential tower business spin-off into our valuations
- We remain Overweight, with a revised target price of INR1,011

Valuation

We believe Bharti is a high growth, blue chip domestic play and therefore can be valued relative to other domestic consumption stocks. We used a PEG based valuation relative to domestic consumptions plays and SOTP method for an absolute valuation.

PEG based valuation

Bharti: PEG based valuation

Company	Current market price (INR)	EPS-CAGR	PEG (x)
Bajaj	2757	17%	1.28
Hero Honda	717	9%	1.69
ITC	176	20%	1.18
M&M	920	21%	0.86
MUL	919	19%	0.92
Tata Motor	950	15%	1.16
TVS Motor	82	18%	0.91
Pantaloon	478	58%	1.00
Bharti	690	49%	0.65
Mean			1.07
Standard deviation			0.3
Bharti Discount			-39%

Source: HSBC estimates. All PEG estimates basis IBES except for Bharti . Bharti as per HSBC estimates.

We have calculated the PEG ratio using the PE multiple FY07e and consensus EPS CAGR for 2006-09e. The mean PEG suggests that Bharti is trading at a discount of c30% to the group mean of 1.07. We believe this discount is too large and apply 25% discount to reflect the regulatory risks associated with the stock, relative to other domestic consumption plays. A 25% discount to the mean PEG of 1.07x leads to FY07e PEG of 0.81x and a value of INR860. The higher end of our valuation range is reflected with c15% discount to the group mean of c1.07x, and gives us a value of INR1,000. The lower end of the valuation range is derived with c40% discount to group mean and gives us a value of INR680.

DCF method

HSBC estimates vs. consensus

(INRm)	2007	2008	2009
Sales			
Mean	184,710	258,652	318,669
High	191,658	282,052	357,594
Low	178,471	238,802	285,823
HSBC estimates	186,935	258,100	337,174
Variance	1%	0%	6%
EBITDA			
Mean	72,107	103,277	129,983
High	75,994	112,796	150,867
Low	69,704	93,048	107,949
HSBC estimates	74,532	107,068	144,221
Variance	3%	4%	11%
EPS (INR)			
Mean	20.5	29.3	37.8
High	22.6	33.3	45.2
Low	19.1	25.4	30.7
HSBC estimates	21.5	30.3	39.7
Variance	5%	3%	5%

Note: Our revenue estimates do not include any revenues from the separate tower business.
Source: HSBC estimates

Our changes in DCF value are driven by the new subscriber numbers we assumed after making changes to our overall India forecasts. Further, we have also aligned our model to incorporate the trends with the latest quarter estimates.

We use DCF to support our PEG-based valuations and suggest that this methodology is best designed to capture the long-term growth dynamics in India. However, we prefer PEG, as we believe that DCF does not reflect the high level of liquidity/scarcity value of Indian domestic consumption plays.

As per our earlier discussion on our overall subscriber estimates for India, we have revised our forecasts for Bharti. We have not made any changes, except to adjust our Bharti model and estimates to the revised India wireless estimates. We suggest a DCF-based value range of INR694-931, implying a DCF-based price of INR838.

SOTP based valuation

We also used DCF-based SOTP approach to value Bharti. In this approach, we assume that Bharti moves its towers into a separate entity. We have assumed that separately-formed tower company monetises the assets by getting into leasing agreements with other telcos. We are assuming that the tower company is separate and there is an arm's-length pricing approach between the tower company and Bharti.

Objective SOTP

SOTP based valuation for Bharti

Strategic business unit	Value per share (INR)
Bharti Ex mobile Towers	756
Bharti broadband & landline	60
Bharti enterprise	130
Separate tower company	146
Cash per share	70
Total share price	1,162

Source: HSBC estimates

Our basic purpose for this entire approach is to estimate the value of Bharti Airtel, excluding the tower infrastructure, and the separate value of the entire tower business.

Why are we valuing it this way?

The higher capex numbers in FY08 and the announcement of the separately-formed tower company clearly suggests that Bharti is pursuing a two-point agenda of higher market share and monetising the assets. We believe once Bharti builds up infrastructure in rural areas, it will have a first-mover advantage and increase its chances to increase its market share. Further we note that once it successfully skims all the markets with a first-mover approach it will try and monetise the assets it has.

Assumptions

We have assumed that the tower company charges the telcos rentals for using the assets. We have assumed that Bharti is also charged equivalent rentals by the separately-formed tower company.

We have stripped off Bharti's wireless business from the infrastructure assets and adjust the EBITDA for the rentals it pays to the tower company. Notably these capital charges allow Bharti to claim tax benefit. The capital charge is assuming that tower companies generate c15% IRR from the same in a period of 15 years. We have assumed that tower company charges c90% to the operators for the total capital charge.

For the tower company, we have assumed that the tower company continues to invest in a similar manner as Bharti mobile services would have done, if there was no spin off. Basically, we have shifted our wireless capex to the separately-formed tower company.

We have assumed the first year of tower business is 2008. We have gradually improved the tenants per tower from 1.1 in FY08 to 2.5 by 2020.We have adjusted both the rentals and the opex for

Financials of the separate tower company (INRm)

Particulars	2007e	2008e	2009e	2010e	2011e	2012e	2013e	2014e	2015e
Opening Towers	38000	64,535	71,494	77,851	85,910	91,552	94,980	96,475	97,212
Incremental towers		26,535	6,960	6,356	8,060	5,642	3,428	1,495	737
Tenants per tower		1.1	1.2	1.3	1.5	1.6	1.7	1.8	2.0
Rental per tower		46332	48185	50112	52117	54201	56370	58624	60969
Growth in lease rentals			4%	4%	4%	4%	4%	4%	4%
Revenue in millions		39,468	49,607	60,860	80,593	95,276	109,222	122,165	142,247
Opex/ tower(INR)		24,800	25,792	26,824	27,897	29,012	30,173	31,380	32,635
Adjustment for inflation			4%	4%	4%	4%	4%	4%	4%
Other costs-Admin and HR		789	992	1,217	1,612	1,906	2,184	2,443	2,845
Total Costs		19,995	23,120	26,276	30,371	33,779	36,575	38,772	40,915
EBITDA in millions		19,473	26,487	34,584	50,222	61,496	72,647	83,393	101,331
EBITDA Margins		49%	53%	57%	62%	65%	67%	68%	71%
Total Capex in millions		-53866	-13704	-12141	-14932	-10244	-6100	-2633	-1285
Depreciation in millions		-9270	-12392	-12484	-12460	-12633	-12465	-12020	-11363
Operating profit		10203	14096	22100	37762	48863	60182	71373	89969
Operating profit margin		26%	28%	36%	47%	51%	55%	58%	63%
Cost of Debt		13826	14649	15377	16273	16888	17254	17412	17489
EBT		-3623	-553	6723	21489	31976	42928	53962	72480

Source: HSBC estimates

inflation. The rental component also consists of opex charge from operators. We have assumed that power costs are fully borne by the operator; however, for other opex items, the tower company charges c60% of the total opex from the operators.

The cash component in our SOTP is the value which accrues to the Bharti wireless business from the sale of tower assets to the separately-formed tower company. In the case of the tower company, we have assumed debt to the same extent.

Rentals for Bharti's tower company (INR)

Capex per site	2,030,000
Repayable period	15
IRR	14%
Capital charge	(27,542)
Charge per operator share	90%
Capital charge per operator	24,788

Source: HSBC estimates

Tower company valuations (USD bn)

Enterprise Valuations	11.0
Net Debt	4.8
Terminal Value	8.8
Market Value	7.1
Value per share	146

Source: HSBC estimates

Target price INR1,011; OW

Valuation (INR)

Valuation approaches	Fair price	Probability	
PEG	860	0.5	430
SOTP	1,162	0.5	581
Target Price			1,011

Source: HSBC estimates

In an attempt to capture all the valuations in our target price we have computed our valuation using a weighted average approach by assigning equal probabilities to both SOTP and PEG approaches. This approach suggests a fair value of INR1,011.

We believe PEG allows capturing the relative domestic consumption story and SOTP allows factoring the potential spin off the tower business.

Our price target suggests a 46.5% potential total return from current levels. As this is above the Neutral band for Indian stocks of +/- 5ppts around our hurdle rate of 13.5%, we rate the stock Overweight.

Risks to valuation

Upside risks, in our view, include:

- Earlier-than-expected telecom industry consolidation might lead to reduced competitive intensity and higher margins in the Indian telecom market. Should this happen, Bharti would gain from potential margin expansion.

- We expect c80% of demand to be met by FY10e; however, infrastructure sharing on a larger scale could result in an expanded market and have a positive bearing on Bharti's valuation. Moreover, we view the hiving off of towers by telcos as a positive development, and expect the scope of infrastructure sharing to get larger.

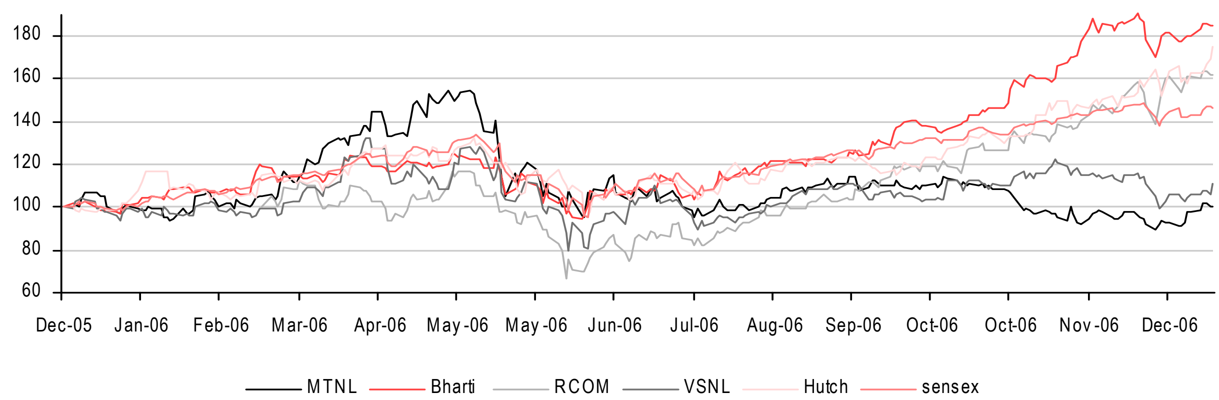
Downside risks, in our view, include:

- Downside risk might occur if RCOM manages to churn high-ARPU/MOU customers. Due to lack of details and visibility, we have not factored the impact of RCOM's entry into the GSM segment in our forecasts.
- Rural expansion may have a negative impact on the ARPU and the EBITDA margins in the short to medium term.
- Downside risk also exists if a spectrum crunch limits Bharti's growth or aids competitor growth in key metro markets, which could potentially have an impact on Bharti's churn rate.
- Delay in release of additional 2G spectrum may be a roadblock to company's subscriber growth plans.
- Downside risk also exists if mobile number portability is implemented in India and Bharti fails to retain its high-ARPU subscriber base.
- Bharti's capex contracts are valued in USD terms and hence, a devaluation of Indian currency is likely to hurt valuation.
- Downside risks also exist if the roaming usage does not pick up to the same extent to compensate for the drop in tariffs.
- Regulatory mandate on mobile virtual network operators (MVNO) is likely to lower EBIDTA margins and raise operational concerns. We expect this to have a negative bearing on Bharti's valuation.

Relative performance of telcos

Bharti outperformed the Sensex on a ytd basis in 2006, with the stock price moving up 85% compared to the Sensex, which moved up 47%. RCOM and HTIL also outperformed the Sensex, with their stock price moving up 62% and 75%, respectively. VSNL and MTNL underperformed the Sensex, with their stock prices moving up 10.9% and 0.5%, respectively.

Relative performance of the telcos



Source: HSBC estimates

Bharti: Profit & loss

INR m, Year to 31 Mar	2006 A	2007e	2008e	2009e	2010e	2011e	2012e
Profit & Loss							
Revenue	116,633	186,935	258,100	337,174	408,958	478,806	543,073
Change	45.7%	60.3%	38.1%	30.6%	21.3%	17.1%	13.4%
EBITDA clean	43,616	75,315	107,811	145,135	178,580	211,721	242,168
Change	46.0%	72.7%	43.1%	34.6%	23.0%	18.6%	14.4%
Margin	37.4%	40.3%	41.8%	43.0%	43.7%	44.2%	44.6%
Exceptional	0	0	0	0	0	0	0
EBITDA	43,600	74,532	107,068	144,221	177,556	210,621	241,033
Depreciation	-14,267	-23,995	-34,651	-49,166	-55,652	-61,318	-67,249
Operating profit clean	29,333	50,537	72,417	95,055	121,903	149,303	173,784
Change	45.1%	72.3%	43.3%	31.3%	28.2%	22.5%	16.4%
Margin	25.1%	27.0%	28.1%	28.2%	29.8%	31.2%	32.0%
Operating profit	27,740	49,011	71,205	94,085	120,836	148,236	172,716
Non-op exceptional	269	1,957	1,370	900	400	0	0
PBIT clean	29,328	50,533	72,417	95,055	121,903	149,303	173,784
PBIT	28,004	50,964	72,575	94,985	121,236	148,236	172,716
Interest paid	-2,387	-4,095	-4,525	-5,724	-3,570	-3,570	-3,570
Interest received	-45	769	157	157	358	2,114	4,363
Interest	-2,432	-3,326	-4,368	-5,567	-3,211	-1,455	793
PBT clean	26,896	47,207	68,050	89,489	118,692	147,848	174,577
Change	54.0%	75.5%	44.2%	31.5%	32.6%	24.6%	18.1%
PBT	25,572	47,638	68,207	89,418	118,025	146,781	173,510
Tax clean	-8,876	-8,455	-10,528	-13,845	-20,143	-28,048	-36,610
Tax rate clean	33.00%	17.91%	15.47%	15.47%	16.97%	18.97%	20.97%
Tax non-clean	6,140	0	0	0	0	0	0
Tax	-2,736	-6,531	-10,528	-13,845	-20,143	-28,048	-36,610
Tax rate	10.7%	13.7%	15.4%	15.5%	17.1%	19.1%	21.1%
Minorities	-254	-283	-283	-283	-283	-283	-283
Net profit clean	17,766	38,470	57,239	75,361	98,266	119,517	137,684
Net profit	22,582	40,824	57,396	75,291	97,599	118,450	136,616
Number of shares (mn)	1,890	1,895	1,895	1,895	1,895	1,895	1,895
EPS clean	9.43	20.30	30.21	39.77	51.86	63.07	72.66
Change	135.6%	46.2%	115.4%	48.8%	31.7%	30.4%	21.6%
EPS	12.0	21.5	30.3	39.7	51.5	62.5	72.1
Change	50.0%	79.8%	40.6%	31.2%	29.6%	21.4%	15.3%
DPS	0.0	0.0	10.0	11.5	13.2	15.2	17.5
Change				15.0%	15.0%	15.0%	15.0%

Note : The financials above do not include any revenues from the possible tower business spin off as discussed in our SOTP approach
Source: Company data & HSBC estimates

Bharti: Balance sheet

INR m, Year to 31 Mar	2006 A	2007e	2008e	2009e	2010e	2011e	2012e
Intangible assets	41,458	40,924	39,711	38,741	37,674	36,606	35,539
Tangible assets	142,397	220,715	304,346	338,303	368,188	400,495	426,119
Investments	692	744	744	744	744	744	744
Fixed assets	184,547	262,383	344,801	377,788	406,606	437,846	462,403
Stocks	545	381	892	2,536	4,368	6,043	7,676
Debtors	17,773	26,490	31,634	33,278	35,110	36,785	38,418
Investments + cash	8,247	5,862	5,237	5,237	11,950	70,627	145,629
Current assets	26,565	32,733	37,764	41,051	51,428	113,455	191,723
Loans & borrowings	-11,237	-12,893	-9,622	-9,622	-9,622	-9,622	-9,622
Other creditors	-40,139	-65,638	-96,821	-128,812	-145,319	-163,418	-183,215
Creditors < 1 year	-51,376	-78,531	-106,443	-138,434	-154,941	-173,040	-192,837
Net current assets	-24,811	-45,798	-68,679	-97,383	-103,513	-59,585	-1,113
Assets less current liabs	110,138	138,749	193,704	247,418	274,275	347,021	436,733
Creditors > 1 year	34,502	46,939	61,924	35,000	35,000	35,000	35,000
Provisions	11,403	11,579	11,579	11,579	11,579	11,579	11,579
Minority interests	951	1,609	1,892	2,175	2,458	2,741	3,024
Equity shareholder funds	91,893	133,577	172,023	225,521	297,984	387,413	490,511
Total	138,749	193,704	247,418	274,275	347,021	436,733	540,114

Note : The financials above do not include any revenues from the possible tower business spin off as discussed in our SOTP approach
Source: Company data and HSBC estimates

Bharti: Cash flow (INR m)

INR m, Year to 31 Mar	2006 A	2007e	2008e	2009e	2010e	2011e	2012e
C/f from ops	59,299	69,106	114,195	151,804	183,063	215,226	245,109
Interest + minority divs	-2,432	-3,326	-4,368	-5,567	-3,211	-1,451	799
Tax	-2,654	-5,018	-6,531	-10,528	-13,845	-20,128	-28,001
Capex + investment	-63,371	-100,760	-118,281	-83,123	-85,538	-93,584	-92,778
Dividends paid	0	0	0	-1,205	-1,321	-2,466	-3,816
Net c/f pre financing	-9,158	-39,998	-14,985	33,636	58,677	75,002	96,308
Financing	6,015	21,211	14,985	-26,924	0	0	0
Change in cash	-3,143	-18,787	0	6,713	58,677	75,002	96,308

Source: HSBC estimates

Disclosure appendix

Analyst certification

The following analyst(s), who is(are) primarily responsible for this report, certifies(y) that the views expressed herein accurately reflect their personal view(s) about the subject security(ies) and issuer(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Tucker Grinnan Iv

Important disclosures

Stock ratings and basis for financial analysis

HSBC believes that investors utilise various disciplines and investment horizons when making investment decisions, which depend largely on individual circumstances such as the investor's existing holdings, risk tolerance and other considerations. Given these differences, HSBC has two principal aims in its equity research: 1) to identify long-term investment opportunities based on particular themes or ideas that may affect the future earnings or cash flows of companies on a 12 month time horizon; and 2) from time to time to identify short-term investment opportunities that are derived from fundamental, quantitative, technical or event-driven techniques on a 0-3 month time horizon and which may differ from our long-term investment rating. HSBC has assigned ratings for its long-term investment opportunities as described below.

This report addresses only the long-term investment opportunities of the companies referred to in the report. As and when HSBC publishes a short-term trading idea the stocks to which these relate are identified on the website at www.hsbcnet.com/research. Details of these short-term investment opportunities can be found under the Reports section of this website.

HSBC believes an investor's decision to buy or sell a stock should depend on individual circumstances such as the investor's existing holdings and other considerations. Different securities firms use a variety of ratings terms as well as different rating systems to describe their recommendations. Investors should carefully read the definitions of the ratings used in each research report. In addition, because research reports contain more complete information concerning the analysts' views, investors should carefully read the entire research report and should not infer its contents from the rating. In any case, ratings should not be used or relied on in isolation as investment advice.

Rating definitions for long-term investment opportunities

Stock ratings

HSBC assigns ratings to its stocks in this sector on the following basis:

For each stock we set a required rate of return calculated from the risk free rate for that stock's domestic, or as appropriate, regional market and the relevant equity risk premium established by our strategy team. The price target for a stock represents the value the analyst expects the stock to reach over our performance horizon. The performance horizon is 12 months. For a stock to be classified as Overweight, the implied return must exceed the required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). For a stock to be classified as Underweight, the stock must be expected to underperform its required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). Stocks between these bands are classified as Neutral.

Our ratings are re-calibrated against these bands at the time of any 'material change' (initiation of coverage, change of volatility status or change in price target). Notwithstanding this, and although ratings are subject to ongoing management review, expected returns will be permitted to move outside the bands as a result of normal share price fluctuations without necessarily triggering a rating change.

*A stock will be classified as volatile if its historical volatility has exceeded 40%, if the stock has been listed for less than 12 months (unless it is in an industry or sector where volatility is low) or if the analyst expects significant volatility. However, stocks which we do not consider volatile may in fact also behave in such a way. Historical volatility is defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility has to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

Prior to this, from 7 June 2005 HSBC applied a ratings structure which ranked the stocks according to their notional target price vs current market price and then categorised (approximately) the top 40% as Overweight, the next 40% as Neutral and the last 20% as Underweight. The performance horizon is 2 years. The notional target price was defined as the mid-point of the analysts' valuation for a stock.

From 15 November 2004 to 7 June 2005, HSBC carried no ratings and concentrated on long-term thematic reports which identified themes and trends in industries, but did not make a conclusion as to the investment action that potential investors should take.

Prior to 15 November 2004, HSBC's ratings system was based upon a two-stage recommendation structure: a combination of the analysts' view on the stock relative to its sector and the sector call relative to the market, together giving a view on the stock relative to the market. The sector call was the responsibility of the strategy team, set in co-operation with the analysts. For other companies, HSBC showed a recommendation relative to the market. The performance horizon was 6-12 months. The target price was the level the stock should have traded at if the market accepted the analysts' view of the stock.

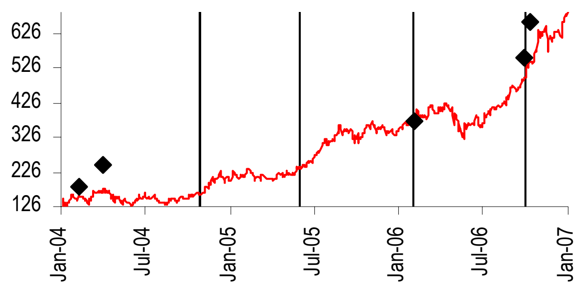
Rating distribution for long-term investment opportunities

As of 24 January 2007, the distribution of all ratings published is as follows:

Overweight (Buy)	41%	(14% of these provided with Investment Banking Services)
Neutral (Hold)	38%	(16% of these provided with Investment Banking Services)
Underweight (Sell)	21%	(13% of these provided with Investment Banking Services)

Share price and rating changes for long-term investment opportunities

Bharti Airtel Share Price performance INR Vs HSBC rating history



Source: HSBC

Recommendation & price target history

From	To	Date
Buy	N/R	15 November 2004
N/R	N/A	22 June 2005
N/A	Neutral	24 February 2006
Neutral	Overweight	23 October 2006
Target Price	**Value**	**Date**
Price 1	185.00	04 March 2004
Price 2	245.00	23 April 2004
Price 3	N/R	15 November 2004
Price 4	376.00	24 February 2006
Price 5	560.00	23 October 2006
Price 6	660.00	02 November 2006

Source: HSBC

HSBC & Analyst disclosures

None of the below disclosures applies to any of the stocks featured in this report.

1 HSBC* has managed or co-managed a public offering of securities for this company within the past 12 months.
2 HSBC expects to receive or intends to seek compensation for investment banking services from this company in the next 3 months.
3 At the time of publication of this report, HSBC is a market maker in securities issued by this company.
4 As of 31 December 2006 HSBC beneficially owned 1% or more of a class of common equity securities of this company.
5 As of 30 November 2006, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of investment banking services.

6 As of 30 November 2006, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-investment banking-securities related services.
7 As of 30 November 2006, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-securities services.
8 A covering analyst/s has received compensation from this company in the past 12 months.
9 A covering analyst/s or a member of his/her household has a financial interest in the securities of this company, as detailed below.
10 A covering analyst/s or a member of his/her household is an officer, director or supervisory board member of this company, as detailed below.

Analysts are paid in part by reference to the profitability of HSBC which includes investment banking revenues.

For disclosures in respect of any company, please see the most recently published report on that company available at www.hsbcnet.com/research.

** HSBC Legal Entities are listed in the Disclaimer below.*

Additional disclosures

1 This report is dated as at 25 January 2007.
2 All market data included in this report are dated as at close 23 January 2007, unless otherwise indicated in the report.
3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Chinese Wall procedures are in place between the Investment Banking and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.

Disclaimer

**Legal entities as at 5 September 2006*
HSBC Bank Middle East Limited, Dubai; The Hongkong and Shanghai Banking Corporation Limited, Hong Kong; HSBC Securities (Asia) Limited, Taipei Branch; HSBC Securities (Canada) Inc, Toronto; HSBC Bank, Paris branch; HSBC Trinkaus & Burkhardt AG, Dusseldorf; 000 HSBC Bank (RR), Moscow; HSBC Securities and Capital Markets (India) Private Limited, Mumbai; HSBC Securities (Japan) Limited, Tokyo; HSBC Securities Egypt S.A.E., Cairo; HSBC Investment Bank Asia Limited, Beijing Representative Office; The Hongkong and Shanghai Banking Corporation Limited, Singapore branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch; HSBC Securities (South Africa) (Pty) Ltd, Johannesburg; HSBC Pantelakis Securities S.A., Athens; HSBC Bank plc, London, Madrid, Milan, Stockholm, Tel Aviv, HSBC Securities (USA) Inc, New York; HSBC Yatirim Menkul Degerler A.S., Istanbul; HSBC Stockbroking (Australia) Pty Limited.

Issuer of report
The Hongkong and Shanghai Banking Corporation Limited
Level 19, 1 Queen's Road Central
Hong Kong SAR
Telephone: +852 2843 9111
Telex: 75100 CAPEL HX
Fax: +852 2596 0200
Website: www.hsbcnet.com/research

This document has been issued by The Hongkong and Shanghai Banking Corporation Limited ("HSBC") in the conduct of its Hong Kong regulated business for the information of its institutional and professional customers; it is not intended for and should not be distributed to retail customers in Hong Kong. The Hongkong and Shanghai Banking Corporation Limited is regulated by the Securities and Futures Commission. All enquires by recipients in Hong Kong must be directed to your HSBC contact in Hong Kong. If it is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate. This document is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. HSBC has based this document on information obtained from sources it believes to be reliable but which it has not independently verified; HSBC makes no guarantee, representation or warranty and accepts no responsibility or liability as to its accuracy or completeness. Expressions of opinion are those of the Research Division of HSBC only and are subject to change without notice. HSBC and its affiliates and/or their officers, directors and employees may have positions in any securities mentioned in this document (or in any related investment) and may from time to time add to or dispose of any such securities (or investment). HSBC and its affiliates may act as market maker or have assumed an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform investment banking or underwriting services for or relating to those companies. In the UK this report may only be distributed to persons of a kind described in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001. The protections afforded by the UK regulatory regime are available only to those dealing with a representative of HSBC Bank plc in the UK. Note that HSBC Securities (USA) is not distributing this report, has not contributed to or participated in its preparation, and does not take responsibility for its contents. In Singapore, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch for the general information of institutional investors or other persons specified in Sections 274 and 304 of the Securities and Futures Act (Chapter 289) ("SFA") and accredited investors and other persons in accordance with the conditions specified in Sections 275 and 305 of the SFA. This publication is not a prospectus as defined in the SFA. It may not be further distributed in whole or in part for any purpose. The Hongkong and Shanghai Banking Corporation Limited Singapore Branch is regulated by the Monetary Authority of Singapore. In Australia, this publication has been distributed by HSBC Stockbroking (Australia) Pty Limited (ABN 60 007 114 605) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). It makes no representations that the products or services mentioned in this document are available to persons in Australia or are necessarily suitable for any particular person or appropriate in accordance with local law. No consideration has been given to the particular investment objectives, financial situation or particular needs of any recipient. In Japan, this publication has been distributed by HSBC Securities (Japan) Limited. It may not be further distributed in whole or in part for any purpose.

Global Telecoms, Media & Technology Research Team

Global
Stephen Howard
Analyst, Co-Global Sector Head
+44 20 7991 6820 stephen.howard@hsbcib.com

Steve Scruton
Analyst, Co-Global Sector Head
+44 20 7991 6819 steve.scruton@hsbcib.com

Europe
Thomas Becker
Analyst
+49 211 910 3426 t.m.becker@ hsbctrinkaus.de

Jakob Bluestone
Analyst
+44 20 7991 6831 jakob.bluestone@hsbcib.com

Nicolas Cote-Colisson
Analyst
+44 20 7991 6826 nicolas.cote-colisson@hsbcib.com

Luigi Minerva
Analyst
+44 20 7991 6928 luigi.minerva@hsbcib.com

Thorsten Zimmermann
Analyst
+49 211 910 2852 thorsten.zimmermann@ hsbctrinkaus.de

North America
Richard Dineen
Analyst
+1 212 525 6707 richard.dineen@us.hsbc.com

Rohit Pandey
Analyst
+1 212 525 6787 rohit.pandey@us.hsbc.com

Niclas De Smet
Analyst
+1 212 525 4588 nicolas.r.desmet@us.hsbc.com

Latin America
Victor Galliano
Analyst
+1 212 525 5253 victor.galliano@us.hsbc.com

Pedro Herrera
Analyst
+1 212 525 5126 pedro.herrera@us.hsbc.com

Europe & North America Credit Research
Robert H Jaeger
Analyst
+44 20 7991 6788 robert.h.jaeger@hsbcgroup.com

Madeleine King, CFA
Analyst
+44 20 7991 6789 madeleine.king@hsbcib.com

Keith Kitagawa
Analyst
+1 212 525 5160 keith.m.kitagawa@us.hsbc.com

Del Ricks
+852 2822 4677 delricks@hsbc.com.hk

Myles McMahon
+852 2822 4676 mylesmacmahon@hsbc.com.hk

Asia
Tse-yong Yao
Analyst
+852 2822 4397 tse-yongyao@hsbc.com.hk

Carlos Dimas
Analyst
+813 5203 3814. carlos.dimas@hsbc.co.jp

Kume Kim
Associate
+813 5203 3654 kume.kim@hsbc.co.jp

Scott Foster
Analyst
+813 5203 3821 scott.foster@hsbc.co.jp

Stephen Leung
Analyst
+852 2822 4551 stephenshleung@hsbc.com.hk

Steven C Pelayo
Analyst
+852 2822 4391 stevenpelayo@hsbc.com.hk

Tejinder Sandhu
Analyst
+852 2996 6716 tejindersandhu@hsbc.com.hk

Tucker Grinnan
Analyst
+852 2822 4686 tuckergrinnan@hsbc.com.hk

Vipin Khare
Analyst
+91 22 2268 1238 vipinkhare@hsbc.co.in

Asia Credit Research
Rachel H F Leung
Analyst
+852 2822 4527 rachelhfleung@hsbc.com.hk

Global Emerging Markets (GEMs)
Hervé Drouet
Analyst
+44 20 7991 6827 herve.drouet@hsbcib.com

Emerging Europe, Middle East & Africa (EMEA)
Vangelis Karanikas
Analyst
+30 210 6965 211 vangelis.karanikas@hpss.hsbc.gr

Karim Khadr
Analyst
+44 202 739 6459 karim.khadr@hsbcib.com

Avshalom Shimei
Analyst
+972 3 710 1197 avshalomshimei@hsbc.com

Bülent Yurdagül
Analyst
+902 12366 1604 bulentyurdagul@hsbc.com.tr

Jesse Solomon
Analyst
+971 4 507 7190 jessesolomon@hsbc.com

EMEA Credit Research
Lyudmila Kan
Analyst
+44 20 7991 5299 lyudmila.kan@hsbcib.com

Specialist Sales

Tim Maunder-Taylor
+44 20 7991 5006 tim.maunder-taylor@hsbcib.com

Paul Sharma
+44 20 7991 5382 paul.sharma@hsbcib.com

Thomas Koenen
+49 211 910 4402 thomas.koenen@trinkaus.de