

## Company Focus

31 October 2007 | 8 pages

# Bharti Airtel (BRTI.BO)

## Buy: 2Q FY08; Separating the Men from the Boys

- EBITDA in line, taking mild wireless setback in its stride** — Bharti's 2QFY08 EBITDA (up 11%qoq) at Rs27.1bn was broadly in line with higher contribution from non-mobile businesses covering the slight shortfall in mobile segment, which was impacted by 6% ARPU decline, a tad higher than expectations. Rupee volatility led to forex loss though partially offset by lower tax rates (7%).
- Lifetime impact moderate vis-à-vis Idea** — 2Q felt the full impact of the new lifetime schemes (Rs495 against Rs999), which was launched in mid-1QFY08. These lifetime subs come in at lower MOU/ARPU but the impact on Bharti's metrics was much more moderate vs. Idea. Mobile revenue growth of 8%qoq was respectable although rev/min decline at 4.5%qoq was in line with Idea's.
- What will MOUs do?** — MOU decline of only 2%qoq was a reassuring (coming after Idea's 6% decline) and could be potentially due to higher quality subs and greater resilience to competition. In the earnings call, management also indicated seasonality effect as well as tariff rationalisation; company expects the MOUs to remain relatively stable as it induces higher usage from new lifetime subs in the coming quarters.
- Other businesses showing promise, tower demerger in 3QFY08** — Long distance business had a stable profitability and recovered from the rupee related setback in 1Q. Fixed line/broadband had a stellar quarter as scale economies and higher ARPUs flowed through in profitability. Tower de-merger will be completed in 3Q. Bharti remains our top pick.

<b>Buy/Low Risk</b>	<b>1L</b>
Price (31 Oct 07)	Rs1,021.00
Target price	Rs1,200.00
Expected share price return	17.5%
Expected dividend yield	0.0%
<b>Expected total return</b>	<b>17.5%</b>
Market Cap	Rs1,937,560M
	US\$49,245M

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

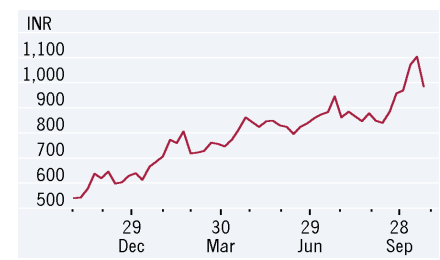


Figure 1. Bharti Airtel – Statistical Abstract

Rs m	2QFY07	1QFY08	2QFY08	Y/Y (%)	Q/Q (%)
Income from Services	43,571	59,046	63,374	45.4	7.3
Access Charges	7,190	9,071	9,317	29.6	2.7
Network Op. Costs	5,228	6,824	7,520	43.8	10.2
Staff + SGA	10,242	12,858	13,159	28.5	2.3
License Fee	3,886	5,827	6,281	61.6	7.8
EBITDA	17,025	24,466	27,097	59.2	10.8
PBT	10,782	18,900	17,471	62.0	(7.6)
PAT	9,338	15,115	16,139	72.8	6.8

Source: Company reports

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

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

### Gaurav Malhotra<sup>1</sup>

gaurav.a.malhotra@citi.com

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

+852-2501-2448  
anand.ramachandran@citi.com

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

Citi Investment Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

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

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
<b>Valuation Ratios</b>					
P/E adjusted (x)	85.7	45.5	27.8	21.6	18.1
EV/EBITDA adjusted (x)	45.8	26.6	17.0	12.7	10.5
P/BV (x)	21.0	14.3	10.0	7.4	5.6
Dividend yield (%)	0.0	0.0	0.5	0.9	1.1
<b>Per Share Data (Rs)</b>					
EPS adjusted	11.92	22.45	36.67	47.37	56.27
EPS reported	11.92	22.45	36.67	47.37	56.27
BVPS	48.67	71.50	102.02	138.77	182.41
DPS	0.00	0.00	5.50	9.50	11.30
<b>Profit &amp; Loss (RsM)</b>					
Net sales	116,215	185,196	276,304	355,682	415,627
Operating expenses	-88,610	-135,896	-193,950	-244,212	-283,434
<b>EBIT</b>	<b>27,605</b>	<b>49,300</b>	<b>82,354</b>	<b>111,470</b>	<b>132,193</b>
Net interest expense	-2,512	-1,438	-3,555	-5,555	-4,657
Non-operating/exceptionals	272	999	3,000	1,000	1,000
<b>Pre-tax profit</b>	<b>25,365</b>	<b>48,861</b>	<b>81,799</b>	<b>106,916</b>	<b>128,536</b>
Tax	-2,539	-5,822	-12,270	-17,106	-21,851
Extraord./Min.Int./Pref.div.	-260	-468	0	0	0
<b>Reported net income</b>	<b>22,566</b>	<b>42,571</b>	<b>69,529</b>	<b>89,809</b>	<b>106,685</b>
Adjusted earnings	22,566	42,571	69,529	89,809	106,685
Adjusted EBITDA	42,981	74,125	117,017	158,198	189,112
<b>Growth Rates (%)</b>					
Sales	45.2	59.4	49.2	28.7	16.9
EBIT adjusted	47.4	78.6	67.0	35.4	18.6
EBITDA adjusted	44.8	72.5	57.9	35.2	19.5
EPS adjusted	47.4	88.4	63.3	29.2	18.8
<b>Cash Flow (RsM)</b>					
<b>Operating cash flow</b>	<b>48,320</b>	<b>70,548</b>	<b>131,324</b>	<b>158,932</b>	<b>179,227</b>
Depreciation/amortization	15,376	24,825	34,663	46,728	56,918
Net working capital	7,295	-672	23,898	16,840	10,967
<b>Investing cash flow</b>	<b>-54,095</b>	<b>-72,788</b>	<b>-138,041</b>	<b>-129,359</b>	<b>-116,410</b>
Capital expenditure	-57,309	-74,798	-138,296	-129,681	-117,310
Acquisitions/disposals	3,631	1,952	0	0	0
<b>Financing cash flow</b>	<b>5,338</b>	<b>7,054</b>	<b>4,532</b>	<b>-24,013</b>	<b>-39,508</b>
Borrowings	-806	7,428	20,000	2,000	-10,000
Dividends paid	0	0	-11,658	-20,136	-23,952
<b>Change in cash</b>	<b>-438</b>	<b>4,813</b>	<b>-2,185</b>	<b>5,560</b>	<b>23,309</b>
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>215,681</b>	<b>296,690</b>	<b>403,797</b>	<b>495,828</b>	<b>580,513</b>
Cash & cash equivalent	2,649	7,464	5,279	10,838	34,147
Accounts receivable	14,203	17,982	22,104	24,898	24,938
Net fixed assets	180,971	248,403	352,357	435,310	495,702
<b>Total liabilities</b>	<b>122,545</b>	<b>159,336</b>	<b>208,572</b>	<b>230,930</b>	<b>232,882</b>
Accounts payable	0	0	0	0	0
Total Debt	34,503	52,461	72,461	74,461	64,461
<b>Shareholders' funds</b>	<b>93,135</b>	<b>137,354</b>	<b>195,225</b>	<b>264,898</b>	<b>347,631</b>
<b>Profitability/Solvency Ratios (%)</b>					
EBITDA margin adjusted	37.0	40.0	42.4	44.5	45.5
ROE adjusted	29.5	37.4	42.3	39.3	35.0
ROIC adjusted	21.7	27.0	30.4	31.0	30.5
Net debt to equity	34.2	32.8	34.4	24.0	8.7
Total debt to capital	27.0	27.6	27.1	21.9	15.6

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

## “Lifetime” impact muted for Bharti

The 2Q saw the full impact of the new lifetime scheme (Rs495 as against Rs999), which were launched in mid-1QFY08. The lifetime subs come in at lower MOUs (that too mainly incoming), which affects average MOUs and rev/min. Impact on Bharti as expected was lesser compared to Idea. This has been due to 1) lower proportion of net adds as percentage of total sub base (2Q net adds 13% v/s 16% for Idea), 2) spreading of old lifetime rentals over 24 months also smoothens the impact on ARPUs and 3) Likely superior user profile of Bharti and hence greater resilience to competitive moves.

**Figure 2. Bharti Airtel – QoQ decline in operating metrics vs. Idea**

	<b>Bharti</b>	<b>Idea</b>
Rev/min (Rs)	-4.5%	-4.8%
MOU (min)	-1.9%	-5.5%
ARPU (Rs)	-6.2%	-10.0%
EBITDA/min (Rs)	-3.6%	-10.3%

Source: Citi Investment Research

## Wireless – Separating men from the boys

**Figure 3. Bharti Airtel – Wireless business parameters**

<b>Rs m</b>	<b>1Q07</b>	<b>2Q07</b>	<b>3Q07</b>	<b>4Q07</b>	<b>1Q08</b>	<b>2Q08</b>	<b>Remarks</b>
Revenue	28,411	33,022	37,579	42,431	46,976	50,579	QoQ revenue growth of 8% lower than past trend due to decline in MoU
EBITDA	10,341	12,179	14,129	16,604	19,087	20,728	
EBITDA margin (%)	36.4	36.9	37.6	39.1	40.6	41.0	Modest increase in margins with rising operating leverage
ARPU	441	438	427	406	390	366	Sharp decline in ARPU with higher proportion of marginal subs
MoU	441	451	467	475	478	469	Lifetime subs, seasonality and rationalisation cause decline
Prepaid % of net adds	93.7	92	96.2	97.3	97.5	95.4	
Data as % of revenues	10.8	10.3	10.4	10.1	9.9	9.8	
Population coverage	46%	50%	54%	59%	62%	65%	On track to achieve 80-85% coverage by FY09
Minutes (mn)	28,194	33,844	41,305	49,240	57,125	64,375	Robust growth of 13% in minutes continues
Rev/min (Rs)	1.01	0.98	0.91	0.86	0.82	0.79	QoQ decline in rev/min slowing
EBITDA/min (Rs)	0.37	0.36	0.34	0.34	0.33	0.32	In line with past trend
Capex/min (Rs)	2.74	3.51	1.26	1.42	2.71	2.73	

Source: Citi Investment Research estimates

## Long distance recovers

Figure 4. Bharti Airtel – Long distance voice parameters

Rs m	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	Remarks
NLD minutes	2,882	3,628	4,429	5,004	5,856	6,774	Another solid quarter with 16% QOQ increase
ILD minutes	753	882	1059	1194	1243	1345	
Revenue	7,064	8,362	9,306	10,156	9,210	10,048	
EBITDA	2,750	3,367	4,002	3,640	3,169	3,462	
EBITDA margin (%)	38.9	40.3	43.0	35.8	34.4	34.5	
EBITDA / LD minutes (Rs)	0.76	0.75	0.73	0.59	0.45	0.43	Impact of rupee appreciation stabilised in 2Q

Source: Citi Investment Research estimates

## Fixed line/Broadband benefiting from quality subscribers and scale benefits

Figure 5. Fixed line and Broadband Parameters

Rs m	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	Remarks
Revenue	5,182	5,244	5,984	6,044	6,513	7,023	
EBITDA	1,193	1,069	1,613	1,727	2,100	2,790	
EBITDA margin (%)	23.0	20.4	27.0	28.6	32.2	39.7	Sharp increase in margins....
ARPU	1202	1115	1198	1112	1121	1150	... led by improved sub quality
Coverage of towns	92	94	94	94	94	94	
Number of DSL subs	383,000	473,070	550,000	593,230	652,818	705,512	

Source: Citi Investment Research estimates

Figure 6. Bharti Airtel – Enterprise business parameters

Rs m	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	Remarks
Revenue	1,969	2,148	2,422	2,511	2,730	3,423	25% Sequential growth
EBITDA	936	907	1,092	1,257	1,159	1,435	
EBITDA margin (%)	47.5	42.2	45.1	50.1	42.5	41.9	

Source: Citi Investment Research

**Tax rate:** Forex losses during the quarter resulted in Bharti's 2Q effective tax rate declining sharply to 7%. However, company maintained its full year effective tax guidance at 15%.

## **Bharti Airtel**

### **Company description**

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

### **Investment strategy**

We rate Bharti Buy/Low Risk (1L). We believe continued robust wireless market expansion and Bharti's ability to capture this growth profitably will be a recurring theme. We estimate an FY07-10 earnings CAGR of 36%, more than double the broader market. We believe that competitive pressures, though intense, will remain rational as low revenue yields and moderate EBITDA margins leave little room for disruptive pricing. Additionally, most regulatory concerns are behind us and 3G recommendations, though discomfiting, cannot derail the growth path, in our view. Combined with strong brand presence and good corporate-governance standards, Bharti appears a strong investment. The company has yet to realize the benefits of economies of scale, and we expect a slight strengthening of margins over the next 2-3 years. We also expect the towerco hive-off (Bharti Infratel) to be a value accretive looking beyond the immediate impact on margins, given Bharti's stated intentions to be a minority stake owner in the towerco.

### **Valuation**

Our 12-month forward target price of Rs1,200 is based on Sep-08 core DCF of Rs1,010 and a towerco option value of Rs170. The DCF is based on a WACC of 10.7%, a terminal growth rate of 4% and beta of 0.9. We prefer DCF as our primary valuation methodology because the wireless market will likely continue to see robust growth requiring upfront capex but should generate significant free cash beyond FY09-10E. Our target price (net of towerco value) represents a FY09E P/E of 21.3x, P/CEPS of 14.0x and EV/EBITDA of 12.5x.

### **Risks**

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

# Appendix A-1

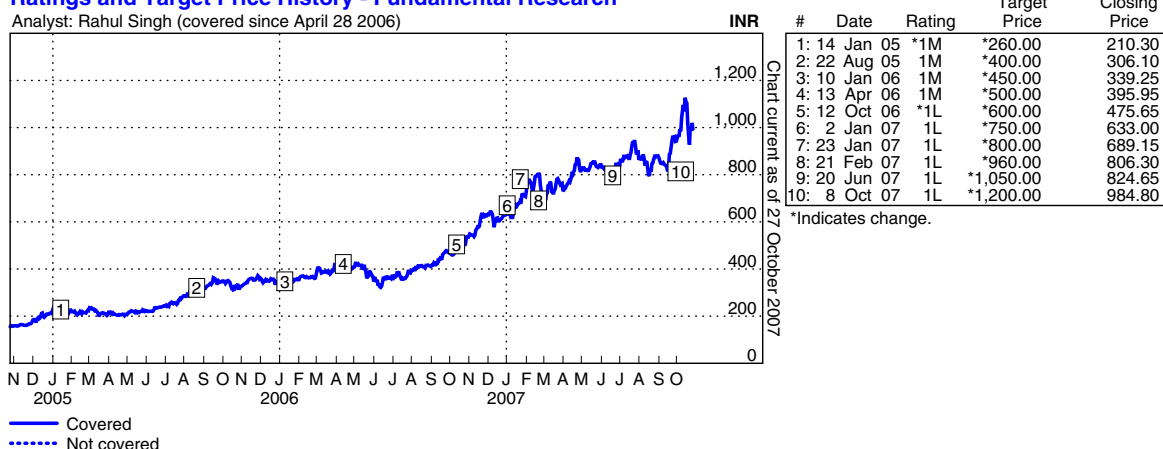
## Analyst Certification

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

## IMPORTANT DISCLOSURES

### Bharti Airtel (BRTI.BO) Ratings and Target Price History - Fundamental Research

Analyst: Rahul Singh (covered since April 28 2006)



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

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

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

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

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

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

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

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

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

### Citi Investment Research Ratings Distribution

Data current as of 30 September 2007

	Buy	Hold	Sell
Citi Investment Research Global Fundamental Coverage (3358)	50%	38%	12%
% of companies in each rating category that are investment banking clients	53%	55%	42%

### Guide to Fundamental Research Investment Ratings:

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

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

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

rating.

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

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

---

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

Citi Investment Research's corporate bond research issuer publications include a fundamental credit opinion of Improving, Stable or Deteriorating and a complementary risk rating of Low (L), Medium (M), High (H) or Speculative (S) regarding the credit risk of the company featured in the report. The fundamental credit opinion reflects the CIR analyst's opinion of the direction of credit fundamentals of the issuer without respect to securities market vagaries. The fundamental credit opinion is not geared to, but should be viewed in the context of debt ratings issued by major public debt ratings companies such as Moody's Investors Service, Standard and Poor's, and Fitch Ratings. CBR risk ratings are approximately equivalent to the following matrix: Low Risk Triple A to Low Double A; Low to Medium Risk High Single A through High Triple B; Medium to High Risk Mid Triple B through High Double B; High to Speculative Risk Mid Double B and Below. The risk rating element illustrates the analyst's opinion of the relative likelihood of loss of principal when a fixed income security issued by a company is held to maturity, based upon both fundamental and market risk factors. Certain reports published by Citi Investment Research will also include investment ratings on specific issues of companies under coverage which have been assigned fundamental credit opinions and risk ratings. Investment ratings are a function of Citi Investment Research's expectations for total return, relative return (to publicly available Citigroup bond indices performance), and risk rating. These investment ratings are: Buy/Overweight the bond is expected to outperform the relevant Citigroup bond market sector index (Broad Investment Grade, High Yield Market or Emerging Market), performances of which are updated monthly and can be viewed at <http://sd.ny.ssbm.com/> using the "Indexes" tab; Hold/Neutral Weight the bond is expected to perform in line with the relevant Citigroup bond market sector index; or Sell/Underweight the bond is expected to underperform the relevant sector of the Citigroup indexes.

---

## OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 31 October 2007 10:24 AM on the issuer's primary market.

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

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

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

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citi Smith Barney Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product may not be distributed to private clients in Germany. The Product is distributed in Germany by

Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in Indonesia through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. If the Product was prepared by Citi Investment Research and distributed in Japan by Nikko Citigroup Limited ("NCL"), it is being so distributed under license. If the Product was prepared by NCL and distributed by Nikko Cordial Securities Inc. or Citigroup Global Markets Inc. it is being so distributed under license. NCL is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. In the event that an error is found in an NCL research report, a revised version will be posted on Citi Investment Research's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, which is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd., a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 lambton Quay, Wellington. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Taiwan through Citigroup Global Markets Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is regulated by NASD, NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Investment Research's Products can be found at [www.citigroupgeo.com](http://www.citigroupgeo.com). Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations. The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product.

---

This Product is not intended for distribution in Poland. Any receipt or review of the Product in Poland is not authorized by the Firm.

---

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

---

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST