

Equities

3 November 2011 | 11 pages

Sun TV Network (SUTV.BO)

Weak Revenue Outlook; Uncertainties Aplenty

- Company Update
- Target Price Change
- Estimate Change

■ **2QFY12 below expectations** — Moderation in all core business drivers - advertising & DTH, cable and international subscription growth were below expectations. The release of 2 movies partially supported overall revenues at Rs4.5bn (+6% yoy) vs. expectations of ~Rs4.6bn. While operating costs were under control, the modest revenue growth led to the profit miss: PAT at Rs1.8bn (+8% yoy) was lower than our/Street estimates of Rs1.87bn. EBIT margins at ~54.9% contracted 190bps yoy & 230bps QoQ on the back of a) higher depreciation (+56% yoy) driven by the capitalization of the new premises & b) amortization (+24% yoy) on account of the new movie releases.

■ **Advertising growth slows to 2% yoy** — Mgmt indicated the weak ad growth (to ~Rs2.3bn) was driven by the broad market slowdown. It believes it will continue to outperform market growth given its dominant viewership shares.

■ **DTH subscription revenues disappoint....** — DTH related subscription revenues declined 6% QoQ to Rs790m, significantly lagging overall DTH market growth in India. Mgmt noted yields were negatively impacted as some contracts with DTH operators came up for re-negotiation. The lower rates are following the Supreme Court ruling in April 2011, which provided DTH operators better bargaining power with broadcasters (details on pg 4). Mgmt now guides to ~12-14% yoy growth in DTH revenues in FY12.

■ **.... And so do cable subscription revenues** — The impact of Tamil Nadu government's revival of the discounted state run cable business (Arasu) were visible – non DTH pay revenues declined of ~13% yoy to ~Rs470m. Mgmt noted that it is negotiating with Arasu and expects to be on its network in the near future.

■ **Downside risks to consensus estimates** — While Sun's positioning in key regional markets & business model are attractive, we remain cautious at this juncture given a) moderating growth & risks to consensus est.; & b) political uncertainties around the promoter family. We pare estimates by ~2-3% over FY12-14E, cutting our revenue forecasts & tweaking operating costs in line with recent trends. Our TP is revised to Rs280 from Rs265 as we roll forward to 12x Mar13E (12x Sept12E earlier).

Neutral/High Risk	2H
Price (03 Nov 11)	Rs273.35
Target price	Rs280.00
	<i>from Rs265.00</i>
Expected share price return	2.4%
Expected dividend yield	3.7%
Expected total return	6.1%
Market Cap	Rs107,723M
	US\$2,190M

Price Performance (RIC: SUTV.BO, BB: SUNTV IN)



Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2010A	5,234	13.28	42.1	20.6	5.7	29.2	2.7
2011A	7,722	19.59	47.5	14.0	4.8	37.3	3.2
2012E	7,899	20.04	2.3	13.6	4.2	32.7	3.7
2013E	9,119	23.14	15.4	11.8	3.7	33.1	4.6
2014E	10,675	27.09	17.1	10.1	3.3	34.3	5.5

Source: Powered by dataCentral

Surendra Goyal, CFA

 +91-22-6631-9870
 surendra.goyal@citi.com

Aditya Mathur

 +91-22-6631-9841
 aditya.mathur@citi.com

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

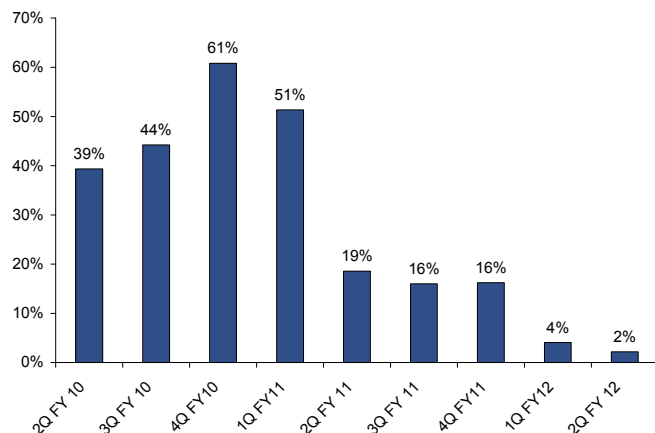
Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Fiscal year end 31-Mar	2010	2011	2012E	2013E	2014E
Valuation Ratios					
P/E adjusted (x)	20.6	14.0	13.6	11.8	10.1
EV/EBITDA adjusted (x)	9.4	6.4	6.3	5.5	4.7
P/BV (x)	5.7	4.8	4.2	3.7	3.3
Dividend yield (%)	2.7	3.2	3.7	4.6	5.5
Per Share Data (Rs)					
EPS adjusted	13.28	19.59	20.04	23.14	27.09
EPS reported	13.28	19.59	20.04	23.14	27.09
BVPS	47.85	57.19	65.58	74.16	83.77
DPS	7.50	8.75	10.00	12.50	15.00
Profit & Loss (RsM)					
Net sales	14,528	20,135	20,145	22,436	25,288
Operating expenses	-6,794	-9,137	-8,872	-9,548	-10,269
EBIT	7,735	10,998	11,273	12,888	15,019
Net interest expense	-49	-23	-86	-86	0
Non-operating/exceptionals	350	487	603	920	1,092
Pre-tax profit	8,035	11,463	11,790	13,723	16,111
Tax	-2,991	-3,831	-3,891	-4,528	-5,317
Extraord./Min.Int./Pref.div.	190	90	0	-75	-120
Reported net income	5,234	7,722	7,899	9,119	10,675
Adjusted earnings	5,234	7,722	7,899	9,119	10,675
Adjusted EBITDA	10,944	15,803	15,822	17,510	19,684
Growth Rates (%)					
Sales	39.8	38.6	0.1	11.4	12.7
EBIT adjusted	49.8	42.2	2.5	14.3	16.5
EBITDA adjusted	48.5	44.4	0.1	10.7	12.4
EPS adjusted	42.1	47.5	2.3	15.4	17.1
Cash Flow (RsM)					
Operating cash flow	9,928	10,696	10,373	13,833	15,645
Depreciation/amortization	3,209	4,805	4,549	4,622	4,664
Net working capital	1,596	-1,811	-2,075	17	186
Investing cash flow	-6,159	-5,083	-4,331	-4,580	-4,618
Capital expenditure	-5,618	-4,810	-4,268	-4,580	-4,618
Acquisitions/disposals	-541	-273	-63	0	0
Financing cash flow	-3,056	-3,950	-2,867	-7,539	-7,007
Borrowings	-715	0	1,724	-1,725	0
Dividends paid	-3,449	-4,015	-4,591	-5,739	-6,887
Change in cash	713	1,663	3,175	1,714	4,021
Balance Sheet (RsM)					
Total assets	25,052	28,669	33,258	35,372	39,730
Cash & cash equivalent	4,367	6,030	9,205	10,919	14,939
Accounts receivable	3,292	4,300	5,243	5,225	5,543
Net fixed assets	12,126	12,132	11,850	11,809	11,762
Total liabilities	4,948	4,883	6,164	4,897	5,468
Accounts payable	0	0	0	0	0
Total Debt	1	1	1,725	0	0
Shareholders' funds	20,104	23,786	27,094	30,475	34,263
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	75.3	78.5	78.5	78.0	77.8
ROE adjusted	29.2	37.3	32.7	33.1	34.3
ROIC adjusted	36.2	49.8	45.5	49.0	57.3
Net debt to equity	-21.7	-25.3	-27.6	-35.8	-43.6
Total debt to capital	0.0	0.0	6.0	0.0	0.0

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

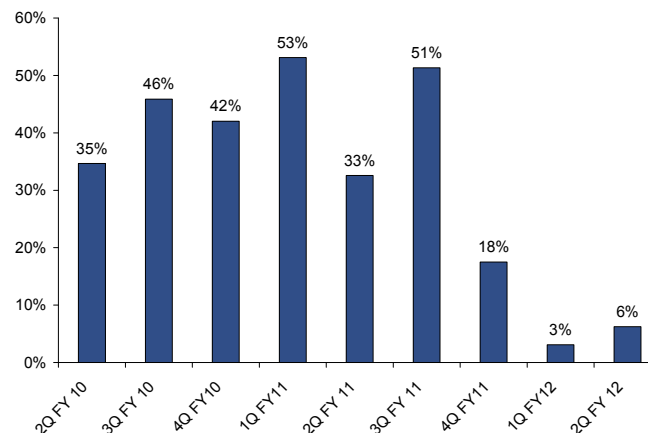
2QFY12 Results Review

Figure 1. Ad Revenues Growth Trends (% YoY)



Source: Company Reports

Figure 2. Total Revenue Growth Trends (% YoY)*



Source: Company Reports and CIRA; *3QFY11 revenues includes contribution from the movie, *Endhiran*

Figure 3. Sun TV Network (Parent): Reported Results (Rs Mn, %)

	2Q FY 11	2Q FY 12	%yoy
Net Sales	4248	4513	6.2
Total Expenditure	-925	-858	-7.2
Operating Profit	3323	3654	10.0
Operating Margin (%)	78.2	81.0	275 bps
Depreciation and Amortisation	-908	-1176	29.6
EBIT	2415	2478	2.6
EBIT Margin (%)	56.9	54.9	-194 bps
Other Income	93	186	101.3
Interest	-3	-8	153.3
PBT	2505	2657	6.1
Tax	-830	-856	3.0
Tax Rate (%)	33.1	32.2	-95 bps
PAT	1674	1801	7.6
Cost Details			
Cost of Revenues	250	225	-10.0
% of sales	5.9	5.0	-90 bps
Staff Costs	407	414	1.8
% of sales	9.6	9.2	-40 bps
Other Expenditure	268	219	-18.2
% of sales	6.3	4.9	-145 bps

Source: Company Reports

Figure 4. Sun TV Network (Parent): Segmental Revenue Trends (Rs Mn, %)

	2Q FY 11	2Q FY 12	%yoy
Advertising	2300	2350	2.2
Broadcast sales	400	390	-2.5
DTH	700	790	12.9
Non DTH Pay	540	470	-13.0
International Pay	160	180	12.5
Movies/Others	148	333	125.0

Source: Company Reports

Figure 5. Sun TV Network (Parent): Balance Sheet Summary (Rs Mn)

As of End	2Q FY 11	2Q FY 12
Cash and Equivalent	4,308	6,397
Sundry debtors	3,498	4,995
Other current assets	1,650	1,656
Inventories	3	3
Loans and advances	1,240	2,387
Total current assets	10,698	15,437
Current liabilities & provisions	3,578	2,285
Net Current Assets	7,120	13,152
Investments	5,881	5,028
Deferred tax assets	(303)	(379)
Net PPE	10,660	10,139
Non Current Assets	176	175
Total assets	23,534	28,115
Share capital	1,970	1,970
Reserves and surplus	21,564	24,419
Share holders' funds	23,534	26,390
Debt	-	1,725
Total liabilities and equity	23,534	28,115

Source: Company Reports

Figure 6. Sun TV Network (Consolidated): Earnings Revision Summary

Year to 31-Mar	2012E			2013E			2014E		
	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg
Sales (Rs Mills.)	20,989	20,145	-4%	23,769	22,436	-6%	26,848	25,288	-6%
EBITDA (Rs Mills.)	16,291	15,822	-3%	18,283	17,510	-4%	20,498	19,684	-4%
EBITDA Margin (%)	77.6%	78.5%		76.9%	78.0%		76.3%	77.8%	
Net Profit (Rs Mills.)	8,068	7,899	-2%	9,390	9,119	-3%	10,888	10,675	-2%
Diluted EPS (Rs)	20.5	20.0	-2%	23.8	23.1	-3%	27.6	27.1	-2%

Source: Citi Investment Research and Analysis estimates

Appendix – Details of the Supreme Court ruling of April 2011

On 18th April 2011, the Supreme Court of India stayed an order of the Telecom Disputes Settlement & Appellate Tribunal (TDSAT), setting aside Telecom Regulatory Authority of India's (TRAI) notification fixing content pricing by DTH operators at 35% of the rates paid by cable for TV channels, and raised the same to 42%. It also added that the agreements between DTH operators and broadcasters, which are already in place, shall prevail.

Historically, DTH companies were expected to pay the broadcasters at 50% of the tariff fixed for cable homes by TRAI. In December 2010, TDSAT had passed an order mandating that broadcasters charge from DTH and IPTV providers up to 35% of the rates paid by cable operators for their channels. On 21st July 2010, TRAI had notified that a new wholesale tariff structure would be effective 1st September, 2010, whereby broadcasters can charge only at 35% of the rates that they charged from normal cable operators while supplying service providers on platforms such as

DTH, IPTV and HITS. After this, leading broadcasters had moved TDSAT challenging TRAI's tariff order to cap the wholesale price of channels to service providers like DTH and IPTV at 35% of the rates for normal cable operators.

The Supreme Court overruling the 35% formula and setting a higher rate (42%) provides the DTH companies better bargaining power while they renegotiate contracts with broadcasters (like Sun TV Network) going forward.

Sun TV Network

Company description

Sun TV Network (Sun) is the dominant broadcaster in the South Indian states of Tamil Nadu, Andhra Pradesh, Karnataka and Kerala, enjoying almost monopolistic advantage in key segments. Sun has the largest broadcasting platform in South India and operates 20 channels in South Indian languages, in key genres like general entertainment, cinema, news, music and kids programs. It began as a single-channel company in Tamil Nadu in 1993, and has evolved into a multi-language and multi-genre broadcaster. Besides TV broadcasting, Sun owns FM radio licenses for 45 cities.

Investment strategy

We rate Sun TV shares Neutral / High Risk (2H). It is the dominant South Indian broadcaster, enjoying strong leadership in its markets. We believe Sun TV will be one of the biggest beneficiaries of the pay market (particularly DTH) ramp up in India. Sun has successfully worked with the free commercial time (FCT) model. We expect ~9% advertising revenue CAGR over FY11-FY13E - slower than its historical growth rates and market expectations. Muted subscription revenue growth outlook is an overhang. Further, risks of rising competition in the regional markets and radio business investment could adversely impact profitability. News flow around political uncertainties around the promoter family will prevent a meaningful re-rating in the near term, in our view.

Valuation

Our target price of Rs280 is based on 12x March13E consolidated EPS. Our target multiple is around trough levels, factoring in the dual risks of a) moderating growth going forward (we forecast ~10% EPS CAGR over FY11-13E v/s ~44% EPS CAGR over FY09-11) and b) the political uncertainties around the promoter family. We note that our target multiple is much lower than the historical 5-year average multiples (>25x one year forward P/E), and just a tad higher than the trough multiples witnessed around the last downturn (~11x). In relative terms, our target P/E multiple will be at a slight discount to the market, much lower than the historical avg. P/E premium of ~70% to the BSE Sensex.

Risks

We rate Sun TV Network shares as High Risk given the political uncertainties around the promoter family which may weigh on the stock price. Key downside risks to our target price include: 1) With increasing competitive intensity in various states, Sun TV could lose market share as channel fragmentation would be in play. This also increases the cost of content and may impact operating margins. 2) Higher than estimated funding for the radio ventures could change financials, return ratios and cash flow profile. 3) Adverse political equations could hurt the stock. Upside risks to our target price include: 1) Company could manage issues with cable / DTH operators better and improve its domestic subscription revenues. 2) Movie business could result in high returns, which may provide upside risk to our estimates. 3) With decent cash flows, any increase in dividend payouts could result in a higher yield and positively impact the stock.

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Sun TV Network (SUTV.BO)

Ratings and Target Price History Fundamental Research

Analyst: Surendra Goyal, CFA

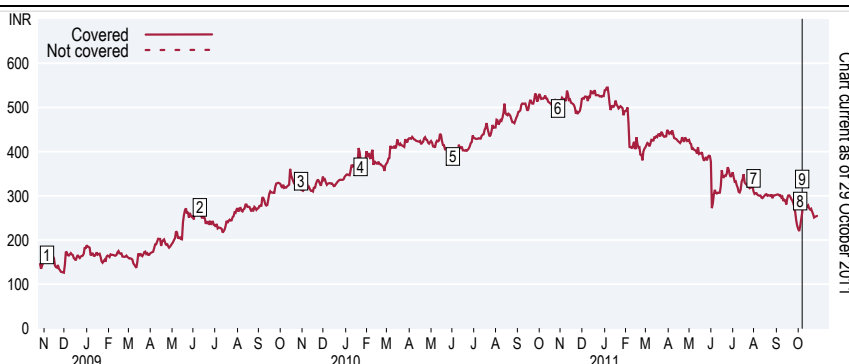


Chart current as of 29 October 2011

	Date	Rating	Target Price	Closing Price
1	6-Nov-08	*1M	*185.00	146.50
2	10-Jun-09	*2M	*298.00	264.45
3	30-Oct-09	2M	*360.00	314.05

	Date	Rating	Target Price	Closing Price
4	22-Jan-10	2M	*435.00	380.30
5	2-Jun-10	*2L	*450.00	399.75
6	28-Oct-10	2L	*525.00	499.50

	Date	Rating	Target Price	Closing Price
7	1-Aug-11	*2M	*345.00	309.75
8	5-Oct-11	*2H	*265.00	231.45
9	7-Oct-11	Stock rating system changed		

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Sun TV Network (SUTV.BO)

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

Analyst: Surendra Goyal, CFA

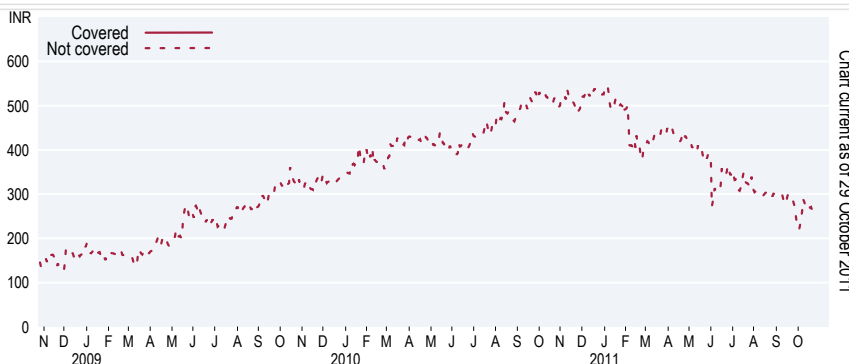


Chart current as of 29 October 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Investment Research & Analysis product ("the Product"), please contact Citi Investment Research & Analysis, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Investment Research & Analysis Ratings Distribution

Data current as of 9 Oct 2011

Citi Investment Research & Analysis Global Fundamental Coverage

% of companies in each rating category that are investment banking clients

12 Month Rating			Relative Rating		
Buy	Hold	Sell	Buy	Hold	Sell
59%	34%	7%	10%	79%	10%
45%	42%	37%	50%	43%	46%

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

CIRA's stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

Investment Ratings: CIRA's investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of CIRA management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.

Relative three-month ratings: CIRA may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of CIRA's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: 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.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets India Private Limited

Surendra Goyal, CFA; Aditya Mathur

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 03 November 2011 04:00 PM on the issuer's primary market.

This Product has been modified by the author following a discussion with one or more of the named issuers/issuers of the named securities.

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

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and

availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Investment Research & Analysis (CIRA) does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of CIRA to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

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

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

Important disclosure regarding the relationship between the companies that are the subject of this CIRA research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at www.morganstanleysmithbarney.com/researchdisclosures. For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to www.morganstanley.com/researchdisclosures and https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html.

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

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Australia** to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Foro Buonaparte 16, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 110-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea

Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.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 Gashka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). 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. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gassef, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different CIRA ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with 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.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to CIRA's Products can be found at www.citigroupgeo.com.

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. With the exception of our product that is made available only to Qualified Institutional Buyers (QIBs), CIRA concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual CIRA analysts may also opt to circulate research posted on such platforms to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels. CIRA simultaneously distributes product that is limited to QIBs only through email distribution. The level and types of services provided by CIRA analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints.

© 2011 Citigroup Global Markets Inc. Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, 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 to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The 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
