29 November 2012 │ 10 pages
Real Estate Development (GICS) │ Real Estate/Property (Citi)
Asia Pacific │ India

Unitech (UNTE.BO)

■ Company Update

Buy: Management Call Takeaways – Execution Ramping Up

We spoke to Unitech management to get an update on execution and business. Key takeaways are:

- **Execution ramping up well** — Liquidity concerns have been resolved. Workers at project sites have increased to 20,000 now from ~10,000 at the bottom. Management expects to increase this to 25,000 by March 13 end.
- **Debt has stabilized** — Consolidated net debt at Rs55.7bn (up from Rs54bn post FY12) has more or less stabilized. Unitech has successfully rolled over ~Rs6-7bn of debt due in 1HFY13. Given improved liquidity and business outlook, management expects to successfully roll over balance debt due in 2HFY13.
- **Sustained increase in prices (~5-6% in 2QFY13) will help margins –** Realization in 2QFY13 has increased 16% QoQ to Rs5400 psf. Out of this increase, ~5-6% is from increase in price and remaining increase is due to mix improvement. Company continues to witness steady increase in prices across locations and projects. This increase in prices will help margins after 2-3 quarters, as the impact of legacy projects on margins goes away.
- **Sales bookings to reach ~Rs10bn/quarter in FY14 –** Sales bookings will remain steady at ~Rs7-8bn/quarter for next 2-3 quarters as company is not focusing on launching new projects. Management believes that once focus on new launches resumes, sales bookings can go above ~Rs10bn/quarter.
- **Maintain Buy/1H** — Risk/reward looks attractive. Margins/execution/launches are likely to pick up from current levels over next 3-4 quarters. Resolution of the telecom dispute would free up management bandwidth and help execution. Valuations continue to be attractive and are at a discount to adjusted (for auditor's comments) Sep'13E book value of Rs34.

Buy/High Risk	**1H**
Price (29 Nov 12)	Rs30.10
Target price	Rs38.00
Expected share price return	26.2%
Expected dividend yield	0.0%
Expected total return	**26.2%**
Market Cap	Rs78,751M
	US$1,414M

Price Performance
(RIC: UNTE.BO, BB: UT IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2011A	5,677	2.17	-21.6	13.9	0.7	5.2	0.0
2012A	2,374	0.91	-58.2	33.2	0.7	2.0	0.0
2013E	3,417	1.31	43.9	23.0	0.6	2.8	0.0
2014E	4,617	1.76	35.1	17.1	0.6	3.7	0.0
2015E	6,271	2.40	35.8	12.6	0.6	4.8	0.0

Source: Powered by dataCentral

Atul Tiwari, CFA
+91-22-6631-9866
atul.tiwari@citi.com

Surendra Goyal, CFA
+91-22-6631-9870
surendra.goyal@citi.com

Rishi V Iyer
+91-22-6631-9871
rishi.iyer@citi.com

Fiscal year end 31-Mar	2011	2012	2013E	2014E	2015E
Valuation Ratios					
P/E adjusted (x)	13.9	33.2	23.0	17.1	12.6
P/E reported (x)	13.9	33.2	23.0	17.1	12.6
P/BV (x)	0.7	0.7	0.6	0.6	0.6
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (Rs)					
EPS adjusted	2.17	0.91	1.31	1.76	2.40
EPS reported	2.17	0.91	1.31	1.76	2.40
BVPS	44.36	45.96	47.26	49.03	51.42
NAVps ordinary	na	na	na	na	na
DPS	0.00	0.00	0.00	0.00	0.00
Profit & Loss (RsM)					
Net operating income (NOI)	**13,402**	**7,345**	**7,585**	**9,976**	**13,266**
G&A expenses	-4,163	-4,064	-2,616	-3,023	-3,790
Other Operating items	-374	-442	-256	-269	-281
EBIT including associates	**8,865**	**2,839**	**4,713**	**6,684**	**9,195**
Non-oper./net int./except.	-404	1,518	286	31	-119
Pre-tax profit	**8,461**	**4,357**	**5,000**	**6,714**	**9,077**
Tax	-2,704	-1,896	-1,502	-2,017	-2,725
Extraord./Min. Int./Pref. Div.	-80	-87	-81	-81	-81
Reported net income	**5,677**	**2,374**	**3,417**	**4,617**	**6,271**
Adjusted earnings	5,677	2,374	3,417	4,617	6,271
Adjusted EBIT	8,920	2,847	4,721	6,691	9,203
Adjusted EBITDA	9,239	3,281	4,970	6,953	9,476
Growth Rates (%)					
NOI	5.1	-45.2	3.3	31.5	33.0
EBIT adjusted	-14.0	-68.1	65.8	41.7	37.5
EPS adjusted	-21.6	-58.2	43.9	35.1	35.8
Cash Flow (RsM)					
Operating cash flow	**9,376**	**18,621**	**7,289**	**-3,517**	**-7,498**
Depreciation/amortization	319	434	249	262	273
Net working capital	3,183	15,689	5,649	-6,581	-12,417
Investing cash flow	**-5,857**	**-6,546**	**-1,452**	**-1,131**	**-1,109**
Capital expenditure	-1,384	0	-1,452	-1,131	-1,109
Acquisitions/disposals	0	754	0	0	0
Financing cash flow	**-2,907**	**-13,302**	**-6,793**	**7,625**	**5,641**
Borrowings	-2,354	-10,413	-6,793	7,625	5,641
Dividends paid	-587	-6	0	0	0
Change in cash	**613**	**-1,227**	**-955**	**2,977**	**-2,966**
Balance Sheet (RsM)					
Total assets	**229,873**	**231,536**	**230,123**	**243,386**	**259,739**
Cash & cash equivalent	4,412	3,185	2,230	5,207	2,241
Net fixed assets	32,941	23,156	24,359	25,229	26,064
Total liabilities	**113,548**	**110,580**	**105,669**	**114,235**	**124,236**
Total Debt	61,648	57,173	50,380	58,005	63,646
Shareholders' funds	**116,325**	**120,956**	**124,454**	**129,151**	**135,503**
Profitability/Solvency Ratios					
EBIT margin adjusted (%)	28.0	11.8	18.0	22.1	24.3
ROE adjusted (%)	5.2	2.0	2.8	3.7	4.8
ROA adjusted (%)	2.2	1.0	1.5	2.0	2.5
Net debt to equity (%)	49.2	44.6	38.7	40.9	45.3
Interest coverage (x)	6.4	5.8	3.9	5.7	6.9

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com

Powered by: dataCentral

Management Call Takeaways

We spoke to Unitech management to get an update on status of execution and business. Following are key takeaways:

- **Sales bookings to remain steady at ~Rs7-8bn/quarter –** Sales bookings to remain steady at ~Rs7-8bn/quarter for next 2-3 quarters as company is not focusing on launching new projects. Over past some time, no new projects have been launched in Gurgaon and sales have been skewed more towards Noida and Greater Noida. Focus is more on construction and once construction ramps up, company will focus on new launches and sales. ***Management believes that once focus on new launches resumes, sales bookings can go above ~Rs10bn/quarter run rate.***

- **~5-6% increase in prices –** Realization in 2QFY13 has increased 16% QoQ to Rs5400 psf. Out of this increase, ~5-6% is from increase in price and remaining is mix improvement. Company continues to witness steady increase in prices.

- **Construction ramp-up is progressing well –** At the peak, the company had 21,000 workers at its project sites. During the slowdown, the number of workers fell by ~40-50%. Over past few months, company has been focusing again on construction and numbers of workers at project sites has increased to 20K now. Management plans to increase number of workers to 25k by FY13 end.

- **Margins to remain subdued over next 2-3 quarters due to legacy projects –** Margins will remain at low levels (~15%) due to pre-March 2009 projects and this will continue for next 2-3 quarters. Most of the revenue relating to pre-March 2009 projects has been booked. However some cost items remain to be booked as there has been a slight cost overrun. Management expects these costs to be booked over next 2-3 quarters.

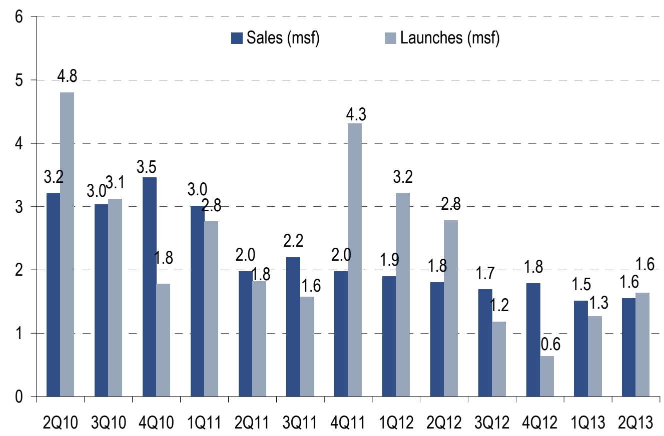
- **Improving realization to help margins –** However given substantial improvement in realizations, margins should revert to 30% over next 1.5-2 years.

- **Increase in debt is not a cause of concern –** Debt has gone up marginally in 1HFY13. This is because of debt taken for construction activity. Strategy is to maintain debt at these levels. Unitech has successfully rolled over all the debt due in 1HFY13. In 2HFY13 ~Rs6-7bn of debt is due. Given improved liquidity, management believes that there should be no issue in rolling over the debt.

- **Slow pace of delivery of pre-March 2009 projects is being tackled now -** Unitech launched ~25msf of projects before March 2009. Out of this ~13msf has been delivered and ~12msf is pending. Of pending ~12msf, a large chunk is in advanced stages of completion. ~95% of area (of pending ~12msf) is almost complete and corresponding revenue has been recognized. However, there has been a delay in hand-over to customers because of slow pace of finishing by contractors. Since construction is complete, most of the revenue has been billed by contractors. As a result, contractors are slow in doing the finishing work (and finishing is labour intensive). However now Unitech is trying to push contractors to finish the projects and hand over to customers.

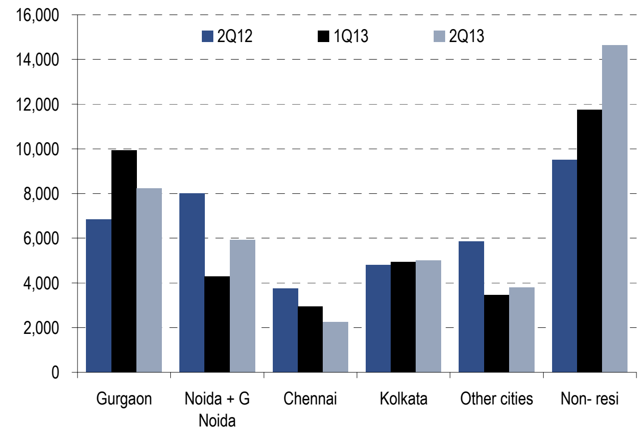
- **Promoter pledges** – Promoter pledges have remained at 70%-80% level for quite some time. Promoters have been repaying outstanding debt and debt outstanding against promoters has come down.

Figure 1. Sales continue to be steady, launches see a pickup



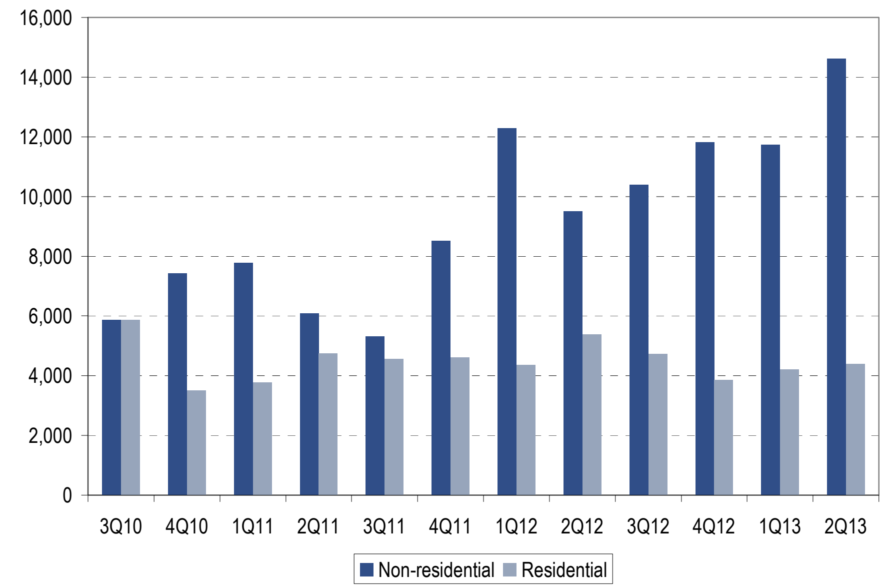
Source: Company, Citi Research

Figure 2. Average realizations have improved



Source: Company, Citi Research

Figure 3. Unitech – Average selling price (Rs/sft) has seen improvement



Source: Company, Citi Research

Figure 4. Execution Snapshot – Projects launched before March 2009

Construction Stage (msf)	3Q11	4Q11	1Q12	2Q12	3Q12	4Q12	1Q13	2Q13
Handover/ Finishing	17.2	17.5	18.3	18.4	19.4	19.5	19.5	19.7
Structure Complete, Internal Work in progress	3.5	3.6	2.8	2.9	2.0	2.4	3.5	3.6
Piling/ Structure Work in Progress	1.9	2.1	1.9	1.9	2.0	1.6	0.5	0.5
Pre-construction	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Total	**23.5**	**24.1**	**23.9**	**24.1**	**24.3**	**24.3**	**24.3**	**24.7**

Source: Company, Citi Research

Unitech

Company description

Unitech is one of India's largest, most diversified real estate developers with an emerging pan-India presence. It enjoys leadership in the markets of NCR and Kolkata. Its core strengths of land acquisition, reputation in building townships and relationships with governments and customers have enabled it to build a diversified portfolio. Unitech has a landbank of ~8,000 acres with total saleable area of ~440m sq ft spread over Chennai, NCR and Kolkata. Residential projects account for ~80% of the landbank and the balance is in commercial (including IT Parks), retail and hotels. The promoter family holds ~48% stake in the company.

Investment strategy

We rate Unitech Buy/High Risk (1H) with a target price of Rs38. With the telecom overhang now behind us, we believe risk reward is favorable. Valuations are comfortable in a historical context - with the stock trading at a discount to its adjusted book value. Net D/E is also comfortable at ~0.4-0.5x. A pick-up in execution could lead to improving fundamentals. The stock of late has been driven more by newsflow related to its telecom holding, rather than fundamentals - the recent resolution here could free up management bandwidth and bring focus to its core business.

Valuation

Our target price of Rs38is based on a 25% discount to our Mar'14E NAV of Rs50 which assumes: a) development volume of ~440msf; b) cost of capital of ~16%; c) cap-rates of 11-12%; d) a tax rate of 30%. We set our discount at the higher end relative to larger peer developers, given unfavorable product mix and lower margins in the near term.

Risks

We assign a High Risk rating to Unitech given that the stock is deemed to be relatively volatile by our quantitative risk-rating model (based on stock price movements in the past year) and pending further reduction in debt. Other key risks we see to the stock achieving our valuation target include the following: (1) continued delays in execution (2) poor response to project launches and (3) lower-than-expected margins.

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

Unitech (UNTE.BO)

Ratings and Target Price History
Fundamental Research

Analyst: Atul Tiwari, CFA
Covered since June 19 2012

	Date	Rating	Target Price	Closing Price
1	23-Aug-10	*2M	*96.00	85.95
2	7-Feb-11	2M	*51.00	44.40
3	30-May-11	2M	*40.00	34.50
4	23-Sep-11	2M	*32.00	27.30
5	5-Oct-11	2M	*30.00	25.20
6	7-Oct-11	Stock rating system changed		
7	7-Oct-11	*2H	30.00	25.90
8	15-Nov-11	2H	*29.00	24.20
9	15-Feb-12	2H	*34.00	31.75
10	19-Jun-12	2H	*27.00	20.80
11	12-Oct-12	*1H	*38.00	26.30

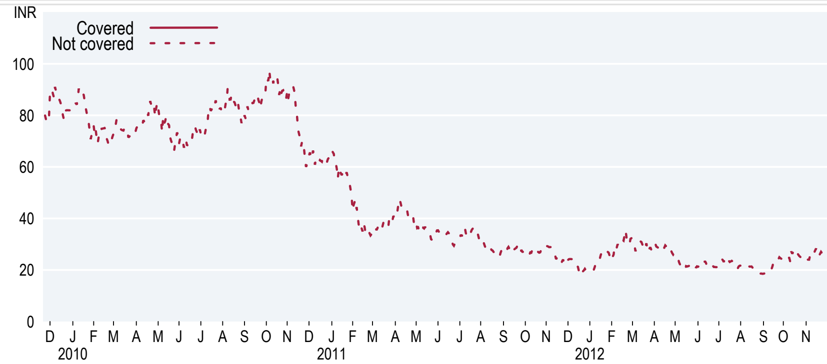
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Unitech (UNTE.BO)

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

Analyst: Atul Tiwari, CFA
Covered since June 19 2012



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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

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

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

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 Research product ("the Product"), please contact Citi Research, 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 https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. 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 Research Ratings Distribution

	12 Month Rating			*Relative Rating*		
Data current as of 5 Oct 2012	**Buy**	**Hold**	**Sell**	**Buy**	**Hold**	**Sell**
Citi Research Global Fundamental Coverage	51%	38%	11%	7%	85%	7%
% of companies in each rating category that are investment banking clients	50%	47%	45%	59%	47%	50%

Guide to Citi Research Fundamental Research Investment Ratings:
Citi Research 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: Citi Research 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 Citi Research 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:** Citi Research 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 the Citi Research 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	Atul Tiwari, CFA; Surendra Goyal, CFA; Rishi V Iyer

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 29 November 2012 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 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 Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi 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.

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 Research research report. Ask your Financial Advisor or use smithbarney.com to view any available Morgan Stanley research reports in addition to Citi Research research reports.
Important disclosure regarding the relationship between the companies that are the subject of this Citi Research 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.citivelocity.com/cvr/eppublic/citi_research_disclosures.
This Citi Research 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 Citi Research. 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 Citi 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. Via dei Mercanti, 12, 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 Citi Velocity website. If you have questions regarding Citi Velocity, 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 100-180, 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 Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No.

460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. 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 the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. 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 Gasheka 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 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, 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 Gasset, 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 Citi Research 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 Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

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) and other product that is made available through other distribution channels only to certain categories of clients to satisfy legal or regulatory requirements, Citi Research concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual Citi Research 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. Citi Research simultaneously distributes product that is limited to QIBs only through email distribution.
The level and types of services provided by Citi Research 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.
Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters and Datastream.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST