

Company

17 June 2010 | 12 pages

Tata Consultancy Services (TCS.B0)

Equity 🗹

Hold: FY10 Annual Report Highlights

- Strong volumes/offshore shift Revenue growth of ~8% YoY (INR) looks muted but volume growth at ~17% YoY (partly due the end-FY09 BPO acquisition) was only slightly lower than FY09's ~19%. High offshore shift (from ~44% to ~51% YoY) reduced reported growth but drove strong margin expansion of ~300bps.
- BFSI drove growth; Emerging markets revenues over \$1bn TCS grew ahead of peers as BFSI (~45% of revs) rebounded in FY10. In terms of geographies, the industry benefited from the sharp US recovery the growth driver for FY10. Emerging markets like LatAm, China, ME and Africa generate over \$1bn now.
- Infosys/TCS stellar performance in a tough year Both Infosys and TCS came out of the downturn strongly with (a) Margin expansion despite pricing pressure on better operational efficiencies, (b) Improved balance sheet lower debtor days, (c) Investment in sales engine and non-linear models, driving longer-term growth.
- Non-linearity a key focus TCS is working on several fronts to achieve growth via non-linear models. The products business is mature while the other initiatives are at an investment stage and are based on cloud computing. Recently in the media, the TCS CEO suggested that, sometime towards the end of the next financial year, it was looking at ~10% of incremental revenues from non-linear business.
- Largest private sector employer With more than 160,000 employees, TCS is the largest private sector employer in India. In FY10, there was a gross addition of more than 38,000 employees while the attrition at ~12% is amongst the lowest in the industry. TCS continues to invest in the skill development of employees with ~1.5m learning days spent in competency development in key technology areas.
- Await better entry point TCS continues to execute well and delivered a strong FY10. Valuations are at ~20x FY11E EPS and supply side challenges/recent macro concerns should limit multiple expansion we await better entry point. However, we believe good cash generation and INR depreciation make it a good defensive.

Hold/Low Risk	2L
Price (16 Jun 10)	Rs771.90
Target price	Rs855.00
Expected share price return	10.8%
Expected dividend yield	1.4%
Expected total return	12.2%
Market Cap	Rs1,510,779M
	US\$32,563M



Statistical Abstract							
Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2009A	51,721	26.42	3.0	29.2	9.7	37.0	0.9
2010A	68,729	35.11	32.9	22.0	7.2	37.6	2.6
2011E	75,873	38.76	10.4	19.9	5.8	32.2	1.4
2012E	83,494	42.65	10.0	18.1	4.7	28.5	1.4
2013F	93 790	<i>1</i> 7 91	12 3	16.1	3.8	26.1	1 /

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

Vishal Agarwal +91-22-6616-2742

vishal1.agarwal@citi.com

Source: Powered by dataCentral

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	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	29.2	22.0	19.9	18.1	16.1
EV/EBITDA adjusted (x)	20.7	17.1	14.9	12.5	10.8
P/BV (x)	9.7	7.2	5.8	4.7	3.8
Dividend yield (%)	0.9	2.6	1.4	1.4	1.4
Per Share Data (Rs)					
EPS adjusted	26.42	35.11	38.76	42.65	47.91
EPS reported	26.42	35.11	38.76	42.65	47.91
BVPS	79.97	107.03	133.78	165.43	202.34
DPS	7.00	20.00	11.00	11.00	11.00
Profit & Loss (RsM)					
Net sales	278,129	300,289	339,987	396,181	451,037
Operating expenses	-212,114	-220,698	-252,083	-295,450	-338,734
EBIT	66,015	79,591	87,904	100,731	112,303
Net interest expense	-4,673	2,255	3,845	8,673	12,298
Non-operating/exceptionals	-6	-10	0	0	0
Pre-tax profit	61,336	81,836	91,749	109,404	124,601
Tax	-9,011	-12,089	-15,076	-25,110	-30,011
Extraord./Min.Int./Pref.div.	-604	-1,018	-800	-800	-800
Reported net income	51,721	68,729	75,873	83,494	93,790
Adjusted earnings	51,721	68,729	75,873	83,494	93,790
Adjusted EBITDA	71,781	86,800	96,904	110,918	123,579
Growth Rates (%)					
Sales	21.7	8.0	13.2	16.5	13.8
EBIT adjusted	23.0	20.6	10.4	14.6	11.5
EBITDA adjusted	20.9	20.9	11.6	14.5	11.4
EPS adjusted	3.0	32.9	10.4	10.0	12.3
Cash Flow (RsM)					
Operating cash flow	71,458	30,303	101,333	75,975	83,968
Depreciation/amortization	5,766	7,209	9,000	10,188	11,276
Net working capital	8,694	-44,398	19,505	-9,834	-9,600
Investing cash flow	-12,673	-53,876	-33,347	-16,654	-10,037
Capital expenditure	-7,495	-11,421	-20,519	-17,000	-17,317
Acquisitions/disposals	11,907	-16,382	3,845	8,673	12,298
Financing cash flow	-18,995	-14,183	-23,512	-21,533	-21,533
Borrowings	-1,788	621	0	0	0
Dividends paid	-13,703	-39,151	-21,533	-21,533	-21,533
Change in cash	39,791	-37,756	44,474	37,787	52,399
Balance Sheet (RsM)					
Total assets	226,858	274,546	340,637	413,275	495,955
Cash & cash equivalent	13,440	10,249	70,596	115,911	172,528
Accounts receivable	60,463	58,098	78,197	91,122	103,739
Net fixed assets	37,494	41,706	53,225	60,038	66,078
Total liabilities	67,215	60,978	74,707	85,384	95,807
Accounts payable	0	0	0	0	0
Total Debt	7,913	3,417	3,383	3,383	3,383
Shareholders' funds	159,643	213,568	265,929	327,891	400,148
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	25.8	28.9	28.5	28.0	27.4
ROE adjusted	37.0	37.6	32.2	28.5	26.1
ROIC adjusted	49.1	42.8	42.4	43.0	42.8
Net debt to equity	-3.5	-3.2	-25.3	-34.3	-42.3
Total debt to capital	4.7	1.6	1.3	1.0	0.8

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



BFSI, Retail & Distribution (low base though) key drivers of growth; Manufacturing, Telecom lagged

BFSI drove growth in FY10

FY10 was a muted year in terms of growth rates for the entire IT industry, given the global macro slowdown. However, TCS's volume growth of $\sim 17\%$ was far ahead of peers (partly helped by an acquisition last year) and reported revenues were lower due to a large offshore shift (which was a big positive contributor to margins). For TCS, revenues grew $\sim 5\%$ in USD terms (volume growth was $\sim 17\%$ while pricing declined $\sim 3\%$).

Retail & Distribution led the growth rates with a volume growth of \sim 28% YoY (though on a smaller base, \sim 10% of revenues) while BFSI, comprising \sim 45% of overall revenues (more than 45,000 associates), bounced back nicely.

Manufacturing and Telecom dragged down the overall growth rates. The discretionary IT spend of the automotive industry shrank in FY10, while the Industrial Manufacturing and Components (IMC) sector, impacted by declining order book positions, cut back even on the "run-the-business" expenses. Telecom witnessed a pull-back in terms of volumes – some of the major customers cut down their spending on outsourcing.

Figure 1. TCS' revenue growth — Vertical-wise						
	FY07	FY08	FY09	FY10		
BFSI	59.4%	23.1%	18.2%	13.1%		
Manufacturing	12.2%	-5.5%	21.2%	-10.6%		
Retail & Distribution	66.3%	33.9%	68.0%	28.3%		
Telecom	53.3%	22.8%	21.8%	-2.9%		
Others	18.4%	27.9%	21.0%	6.0%		
Total	40.9%	21.1%	23.0%	8.0%		

How does this compare with peer Infosys?

Source: Company Reports

A comparison with Infosys' (INFY.BO; Rs2,741.40; 2L) growth rates in the different industry segment reveals that TCS came in higher in BFSI, Retail & Distribution and Telecom while Infosys fared better in Manufacturing and the "Others" segment. In BFSI, TCS would have benefited from the BPO acquisition, which came in towards the end of FY09 while in Telecom, both companies were impacted by declining growth in one large European customer, in our view.

	BFSI	Manufacturing	Retail & Distribution	Telecom	Others	Total
TCS	13.1%	-10.6%	28.3%	-2.9%	6.0%	8.0%
Infosys	5.0%	5.4%	11.1%	-6.3%	11.6%	4.8%

~300bps expansion in operating margins

In a tough year with little visibility on growth, the company focused aggressively on operational efficiencies and improved the operating margin by $\sim 300 \, \text{bps}$ YoY. One of the big reasons for the sharp expansion in margins was a big shift in offshore proportion of revenues from $\sim 44\%$ to $\sim 51\%$ of overall revenues.

Operating efficiencies, offshore shift and cost management resulted in ~300bps margin expansion in a difficult year

In terms of verticals, Retail & Distribution led with a margin improvement of ~500bps with BFSI also chipping in with an improvement of ~290bps. Despite a decline in revenues, Manufacturing showed a margin improvement of ~130bps and Telecom had a margin improvement of ~75bps.

How does it stack-up vis-à-vis Infosys?

Infosys also improved its margin YoY by ~140bps, mainly led by BFSI and Telecom, where the margin improvements were either in line with TCS or better. However, Infosys witnessed some decline in margins in the Manufacturing vertical.

Figure 3. Comparison of operating margin change - Vertical-wise

	BFSI	Manufacturing	Retail & Distribution	Telecom	Others	Total
TCS	288bp	133bp	503bp	76bp	224bp	305bp
Infosys	304bp	-38bp	127bp	250bp	47bp	140bp

Source: Company Reports

Americas strong/Europe sluggish in FY10

Americas recovered in FY10 and posted a revenue growth of ~11% (comprising ~58% of revenues). Europe, with ~27% of revenues, struggled through the year and declined in revenues. India and the "Others" segment grew nicely, though on much smaller bases (high single digits).

Figure 4. TCS' revenue growth - Geography

	FY07	FY08	FY09	FY10
Americas	34.3%	17.9%	25.9%	10.7%
Europe	78.8%	24.1%	24.4%	-2.5%
India	1.5%	21.6%	6.7%	19.1%
Others	45.9%	35.0%	15.3%	18.2%
Total	40.9%	21.1%	23.0%	8.0%

Source: Company Reports

How does it stack-up vis-à-vis Infosys?

A comparison with Infosys' growth rates in the different geographies reveals that TCS was ahead in most of them, though growth in Americas was largely similar. This is not a like-to-like comparison, given that TCS would have benefited from the BPO acquisition made in late FYO9.

Figure 5. Comparison of revenue growth - Geography

	Americas	Europe	India	Others	Total
TCS	10.7%	-2.5%	19.1%	18.2%	8.0%
Infosys	9.1%	-8.3%	-7.9%	15.1%	4.8%

Source: Company Reports

Global Network Delivery Model (GNDM)

The Company has been using a network of Global Delivery Centers (GDCs) to service client requirements as part of its GNDM strategy. The composition of Company's revenues from offshore, GDC and onsite were ~51/6/43% respectively in FY10, a meaningful change over FY09 of ~44/5/51%.

Americas was the key driver of growth though India/Others did well on a low base

Contribution from GDC continues to inch up – from ~5% in FY09 to ~6% in FY10

As of 31 Mar 10, TCS had 142 offices in 42 countries, as well as 105 delivery centers in 20 countries. It had:

- 18 offices in US and Canada
- 12 offices in 7 countries in Latin America
- 11 offices in UK and Ireland
- 22 offices in 12 countries in Europe
- 18 offices in 12 countries in Asia Pacific
- 7 offices in Middle East and Africa
- 54 offices in 13 locations in India

TCS' geographical growth strategy has a two-pronged approach focused on major markets and new growth markets. It continues to pursue localization strategies.

In mature markets like North America, TCS has strengthened local presence by focusing on growing its investments in Cincinnati, Ohio by recruiting local talent to support North American operations. In Europe, the Company has increased its focus on the Western European markets like Germany, France, Benelux and the Nordic region. TCS continues to invest in emerging markets such as Latin America, Middle East, Africa and Eastern Europe.

Non-linear initiatives and Cloud computing

TCS is working on several models to achieve growth through non-linear models. The most mature is the products business with ~3% of revenues (up ~23% YoY) in FY10. While the majority of products are in the BFSI space, TCS is also developing solutions in Healthcare, Retail and the Government sectors.

The other non-linear initiatives are at an investment stage. They are new business models based on cloud computing initiatives. Among the segments that TCS is targeting include small and medium enterprises (charges monthly usage fees on a subscription basis), rural and cooperative banks ("Bank in a Box"). It is also building Process Clouds on a number of horizontal and vertical processes. These investments are expected to mature and progress beyond pilots in FY11.

In a recent media interview, the TCS CEO suggested that, sometime towards the end of the next financial year, it was looking at $\sim 10\%$ of its incremental revenues to come from non-linear business. With an expected industry growth rate of $\sim 15\%$ and revenue base of $\sim \$6.3$ bn in FY10, the numbers start looking meaningful at $\sim \$100$ m.

Human Resources

TCS is the largest private sector employer in India with total employee strength of 160,429 (including subsidiaries). The employees are from 80 nationalities – this diverse and global base of employees is central to TCS' competitive strength.

TCS is looking at ~10% of incremental revenues to come from non-linear business in the next financial year

Largest private sector employer in India

- TCS has 10,475 non-Indian nationals amongst its employee base globally.
- The percentage of women working for the company is 30.4%.

Competency and career development continued to be thrust areas for the Company. Overall, 1,458,079 learning days were invested towards competency development in key technology areas and 11,276 managers at various levels attended leadership development programs. To widen the reach of Learning and Development (L&D) globally, 25% of the total L&D effort was delivered through e-Learning in FY10.

More than 17,524 trainees completed the Initial Learning Program (ILP). TCS employees gained 9,151 new technology and process certifications during FY10 as part of the Continuous Learning Program (CLP).

Research & Development

Total R&D expenditure in FY10 was Rs844m (FY09: Rs490m) which was $\sim 0.3\%$ of revenues.

87 patents were filed during the year in several countries. Cumulatively, TCS has filed 295 patent applications of which 60 have been granted. During FY10, there were six patent grants.

The R&D efforts of the Company have resulted in the creation of software tools and usage of these licenses internally has yielded savings of ~\$25m according to the company.

Other Data Points

- TCS e-Serve Ltd (from the acquisition of Citi BPO), posted a good performance in FY10. It recorded revenues of Rs15.2bn (up ~19% YoY) and profits of Rs6.6bn, which was significantly higher than previous year's Rs0.8bn. FY10 profits had a one-time write back of ~Rs3.1bn, according to our calculations (company indicated that net margins for TCS e-Serve were in line with the overall company). This would have added ~1% to the company overall net margins.
- The TCS Group has provided guarantees aggregating to Rs17.2bn (£252.5m) (unchanged YoY) to third parties on behalf of its subsidiary Diligenta Ltd. The Group does not expect any outflow of resources in respect of the above.
- TCS Financial Solutions increased its customers by adding 53 new clients during FY10. In addition, 36 clients went "live" on BaNCS solutions during the year.
- DSOs were 71 days as on 31 Mar 10 (79 days as on 31 Mar 09). The Company took steps to improve the billing and collection process and put in place a continuous monitoring system.
- The closing balance of hedging reserve account as at 31 Mar 10 showed a loss of Rs61m (Rs7.3bn loss as at 31 Mar 09).

TCS e-Serve witnessed a sharp margin expansion YoY driven by write backs – as per management margins here are in line with rest of the company

Tata Consultancy Services

Company description

TCS is the largest and among the oldest IT companies in India. It is a part of the diversified Tata Group, one of the largest corporate groups in Asia, with more than 160,000 employees, including subsidiaries. It provides a comprehensive range of IT services to industries such as Banking & Financial Services, Insurance, Manufacturing, Telecom, Retail and Transportation. It has more than 900 active clients. The company started with data processing work in 1968, and was the first to provide offshore services in 1974. Over the past three decades, it has come a long way with deep technical and project management expertise in handling complex client projects and strong offshore processes.

Investment strategy

We rate TCS Hold/Low Risk (2L). The stock has outperformed the Indian markets by more than 100% since the beginning of 2009. The company has benefitted significantly from the return of spends in the BFSI segment and we are worried that this might taper. We may see good growth in FY11 due to pent up demand, however, we are concerned that expectations are running ahead of reality. Its earlier valuation discount vis-à-vis Infosys has virtually ceased to exist.

Valuation

Our target price of Rs855 is based on 21x the average of FY11-12E EPS. Given that businesses are bottoming and we estimate TCS' earnings will grow at an ~11% CAGR over FY10-13E, we believe the stock should trade closer to the higher end of its historical three-year trading range of 7-27x 12-month forward earnings. We believe PE remains the most appropriate valuation measure given TCS' past profitability and future earnings visibility.

Risks

We rate TCS Low Risk despite our quantitative risk-rating system suggesting High Risk. The company has significant scale, enjoys a good brand name and continues to generate significant FCF. Key downside risks that could cause the shares to be lower than our target price are: 1) any significant appreciation of the rupee against the USD/EUR/GBP; 2) a prolonged recession in the US; and (3) any margin-dilutive acquisition. Key upside risks that could cause the shares to be higher than our target price are: 1) any significant depreciation of the rupee against the USD/EUR/GBP; 2) aggressive pent up demand from corporates in the US; and 3) any margin accretive acquisition.

Infosys Technologies

(INFY.BO; Rs2,741.40; 2L)

Valuation

Our Rs2,935 target price for Infosys is based on 22x the average of FY11-12E EPS. This is around the mid-point of the last 3-year trading band of 11x-30x 12-month forward earnings and factors in some deceleration in growth. Our estimates continue to assume a certain P/E premium to the market; this is justified, in our view, given the strong FCF and ROIC for Infosys vs. the overall market. We believe P/E remains the most appropriate valuation measure given Infosys' profitability record and higher earnings visibility.

Risks

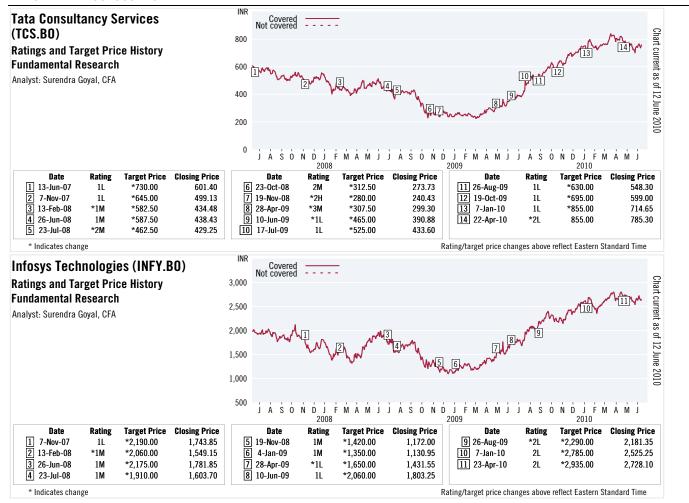
We rate Infosys Low Risk given its superior branding, management quality and cost optimization abilities. This is in line with our quantitative risk-rating system, which tracks 260-day historical share price volatility. Key downside risks to our target price include: 1) any significant appreciation of the rupee against the USD/EUR/GBP; 2) pressure on billing rates (as Infosys still continues to enjoy a 10-15% premium in its billing rates); 3) a prolonged slowdown in the US economy; and 4) limited H1B visas. Key upside risks include: 1) any significant depreciation of the rupee against the USD/EUR/GBP; and 2) a pickup in the US/global economy.

Appendix A-1

Analyst Certification

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

IMPORTANT DISCLOSURES



Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Tata Consultancy Services.

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

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Tata Consultancy Services, Infosys Technologies in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Tata Consultancy Services.

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, securities-related: Tata Consultancy Services, Infosys Technologies.

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: Tata Consultancy Services, Infosys Technologies.

Rohini Malkani has in the past worked with the India government or its divisions in her personal capacity.

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.

The Firm is a market maker in the publicly traded equity securities of Infosys Technologies.

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. 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 31 Mar 2010	Buy	Hold	Sell
Citi Investment Research & Analysis Global Fundamental Coverage	51%	36%	14%
% of companies in each rating category that are investment banking clients	48%	46%	39%

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

CIRA's stock recommendations include a risk rating and an investment rating.

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

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

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

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

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

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, Vishal Agarwal

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 16 June 2010 04:00 PM 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 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. Incorporated (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.

The required disclosures provided by Morgan Stanley and Citigroup Global Markets, Inc. on Morgan Stanley and CIRA research relate in part to the separate businesses of Citigroup Global Markets, Inc. and Morgan Stanley that now form Morgan Stanley Smith Barney LLC, rather than to Morgan Stanley Smith Barney LLC in its entirety. 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 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. 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 may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in Indonesia through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. 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 Nikko Cordial 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 Financial Services Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, 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 through Citigroup Global Markets New Zealand Ltd. (Company Number 604457), a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 Lambton Quay, Wellington. The Product is made available in 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 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. Chalubinskiego 8, 00-630 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup

Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in 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 Taiwan through Citigroup Global Markets Taiwan Securities Company Ltd., which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 1, Songzhi Road, Taipei 110, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in 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 regulated by FINRA and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013, Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to 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.

© 2010 Citigroup Global Markets Inc. Citi Investment Research & Analysis is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. 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 is prohibited by law and will result in prosecution. 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, redisseminated 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 information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST