



Company

21 July 2009 | 10 pages

Dr Reddy (REDY.BO)

Buy : Mixed Bag; Long-Term Story Intact

- Some hiccups 1Q results were marginally below expectations & reflect headwinds in Russia & Germany that bear watching in the near term. However, its businesses in the US, India & other emerging markets have seen significant traction & allowed it to partially offset the former. We expect growth rates to pick up in 2H & recommend using any result-related weakness as a buying opportunity. DRL remains one of our top picks in Indian pharma.
- 10: mixed bag Core biz (excl Imitrex AG) grew just c7% YoY, despite robust growth (42% YoY) in US, due to headwinds in Russia (up 2% YoY) & Germany (down 36% YoY). Core biz gross margins appear to be higher by c200bps on cost saving & favorable currency. Higher amortization (recurring) & tax rate (quarterly skew) led to a 7% YoY decline in rec PAT (c6% below our estimate). Reported PAT grew 120% on high margin Imitrex AG sales (Rs2bn in 1QFY10).
- Update on key markets a) US: Omeprazole OTC launch by end 2QFY10 Imitrex competition expected in mid Aug; b) Russia: bears watching – sales expected to pick up from 3Q; c) Germany: significant pricing pressure due to increased tender activity by insurance firms – fresh AOK tender for 94 products launched – supplies to commence in Jan'10 – bidding in Aug/Sept; d) India: plans to launch 2 biosimilars in FY10 – supply chain initiatives on track – signs of pickup in growth rates.
- Other earnings call takeaways a) FY10 guidance maintained; b) Some supplies to GSK in FY10 but will ramp up only over 12-18 months; c) SEZ land acquisition completed, expect construction to commence in the next few months; d) Integration of discovery services with Aurigine completed; e) R&D expense to be at c6% of sales in FY10.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2007A	5,191	30.91	279.9	25.5	3.2	16.3	0.3
2008A	5,372	31.94	3.3	24.7	2.8	12.1	0.6
2009E	4,668	27.76	-13.1	28.4	3.2	10.6	0.6
2010E	7,410	44.06	58.7	17.9	2.7	16.4	0.7
2011E	9,572	56.92	29.2	13.9	2.3	17.9	0.8

Source: Powered by dataCentral

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

Buy/Medium Risk	1M
Price (21 Jul 09)	Rs789.55
Target price	Rs825.00
Expected share price return	4.5%
Expected dividend yield	0.7%
Expected total return	5.2%
Market Cap	Rs133,171M
	US\$2,767M

Price Performance (RIC: REDY.BO, BB: DRRD IN)



Prashant Nair, CFA

+91-22-6631-9855 prashant.nair@citi.com Akshay Rai akshay.rai@citi.com

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.

Customers of the Firm in the United States can receive independent third-party research on the company or companies covered in this report, at no cost to them, where such research is available. Customers can access this independent research at http://www.citigroupgeo.com or http://www.smithbarney.com or can call (866) 836-9542 to request a copy of this research.

Equity 🗹

Mixed Bag

DRL's 1Q results were marginally below expectations & reflect headwinds in Russia & Germany that bear watching in the near term. However, its businesses in the US, India & other emerging markets have seen significant traction & allowed it to partially offset the former. We expect growth rates to pick up in 2H & recommend using any result-related weakness as a buying opportunity. DRL remains one of our top picks in Indian pharma.

1QFY10 Earnings Snapshot

DRL's 1QFY10 results were a mixed bag. Recurring net income of Rs1.38bn was c6% below our estimate. Good traction in the US, India & other emerging markets helped offset the impact of headwinds in Russia/CIS & Germany. Moreover, gross margins (excluding Imitrex AG sales) also improved by an impressive 200bps YoY on the back of favorable currency & cost reduction initiatives. Higher amortization (recurring) & tax rate (quarterly skew) led to a 7% YoY decline in recurring PAT. Reported PAT grew 120% YoY on high margin Imitrex AG sales (Rs2bn in 1QFY10).

FY10 guidance maintained

- 10% top-line growth and return ratios in the mid to high teens
- Expects strong growth in US & Indian markets to compensate for poor performance in Russia & Germany
- Expects revenues in Germany to be lower than FY09 level vs. flat sales indicated earlier
- US launch of fondaparinux not built into the guidance

Year to Mar 31	1Q FY09	1Q FY10	Ch YoY	4Q FY09	% Ch QoQ	CIRA Comments	
Revenues	15,038	18,189	21.0	19,851	(8.4)	Recurring PAT c6% below estimate – largely on	
Cost of revenues	7,544	8,017	6.3	9,081	(11.7)	account of headwinds in Russia & Germany	
Gross Profit	7,494	10,172	35.7	10,770	(5.6)		
Gross Margin (%)	49.8	55.9	609 bps	54.3	167 bps	Ex Imitrex AG, sales grew by 7% YoY in 1QFY10	
S,G&A Expenses	4,708	5,420	15.1	4,951	9.5	We estimate base biz gross margins of c52% -	
as a % of sales	31.3	29.8	-151 bps	24.9	486 bps	Overall margins was buoyed by high margin Imitrex	
R&D Expenses	1,050	985	(6.2)	1,135	(13.2)	AG sales (<u>Citi estimate: 85% GM</u>)	
as a % of sales	7.0	5.4	-157 bps	5.7	-30 bps		
Amortization Expenses	377	507	34.5	14,339	(96.5)	SG&A costs higher due to one-time costs on sales	
Other operating exp/(inc)	241	(35)	(114.5)	(186)	(81.2)	force exit at Betapharm & closure of Atlanta facility	
Total Operating Expenses	6,376	6,877	7.9	20,239	(66.0)	 excluding this S,G&A expenses grew 6% YoY 	
Operating Income	1,118	3,295	194.8	(9,469)	(134.8)	Amortisation costs higher due to amortisation of	
Operating Margin (%)	7.4	18.1	1,068 bps	(47.7)	6,582 bps	intangibles related to Beta brand which was not	
Equity in Loss of Affiliates	-	(11)	nm	(14)	nm	-	
Forex Loss / (Gain)	(176)	84	(147.7)	400	(79.0)	expensed earlier. This is recurring in nature.	
Other (Income) / Expenses	99	51	(48.5)	(318)	(116.0)	Tax rate higher in 1QFY10 due to greater sales	
PBT	1,195	3,171	165.4	(9,537)	(133.2)	from US – FY10 tax rate guidance of c17%	
Тах	84	726	764.3	240	202.5	One time expenses include €7.2m costs on exit of	
Effective tax rate	7.0	22.9	1,586 bps	(2.5)	2,541 bps	-	
Reported Net Income	1,111	2,445	120.2	(9,777)	(125.0)	sales force at Betapharm and US\$1.5m costs	
One time expenses	365	355	nm	13,023	nm	related to closure of Atlanta facility	
Upside from Imitrex AG (est)		1,421	nm	2,461	(42.2)	Imitrex AG: Assumed 85% GM, 20% tax rate	
Recurring Net Income	1,476	1,379	(6.6)	785	75.6	,	

Figure 1. 3QFY09 Consolidated Earnings Summary (Rs m, %)

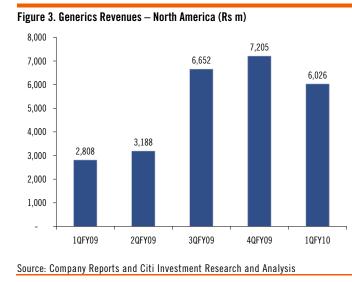
Source: Citi Investment Research and Analysis

2

Year to Mar 31	1Q FY09	1Q FY10	Ch YoY	4Q FY09	% Ch QoQ	CIRA Comments
Pharma Services & Active Ingredients	4,613	4,870	5.6	4,860	0.2	Growth driven by launch of new products
- India	722	629	(12.9)	572	10.0	
- North America	1.085	995	(8.3)	833	19.4	including Gemcitabine, Montelukast,
- Europe	1,080	1,371	26.9	2,153	(36.3)	Sumatriptan & Levetiracetam as well as INF
- ROW	1,726	1,875	8.6	1,302	44.0	depreciation
Global Generics	10,287	10,520	2.3	14,669	(28.3)	N.America sales up of 42% YoY, excluding
Branded Generics	4,485	4,885	8.9	4,368	11.8	Imitrex AG (21% in US\$ terms) on the back
- India	2,202	2,393	8.7	2,072	15.5	
- Russia	1,499	1,529	2.0	1,399	<i>9.3</i>	14% volume growth in existing products
- CIS	429	342	(20.3)	435	(21.4)	India sales growth driven by growth in key
- ROW	355	621	74.9	462	34.4	brands (Omez, Nise, Razo)
Generics	5,802	8,134	40.2	10,301	(21.0)	
<u>- North America</u>	2,808	6,026	114.6	7,205	(16.4)	Decline in Betapharm sales on account of
Authorized Generic	-	2,090	nm	3,619	(42.2)	destocking by the trade ahead of the AOK
Continuing Business	2,808	3,936	40.2	3,586	9.8	tender supplies & withdrawal of olanzapine
<u>- Europe</u>	2,994	2,108	(29.6)	3,096	(31.9)	
Betapharm, Germany	2,521	1,605	(36.3)	2,583	(37.9)	Tepid growth in Russia due to inventory
Others	473	503	6.3	513	(1.9)	holding correction at the trade level
Innovative Products	138	300	117.4	177	69.5	Base biz growth expected to pick up in the
Others	-	-	nm	145	nm	2HFY10 with likely recovery in Russia and
Total revenues	15,038	18,189	21.0	19,851	(8.4)	
Continuing / Base Business	15,038	16,099	7.1	16,232	(0.8)	Omeprazole OTC launch in the US

Figure 2. 3QFY09 Consolidated Revenue Breakup (Rs m, %)

Source: Citi Investment Research and Analysis



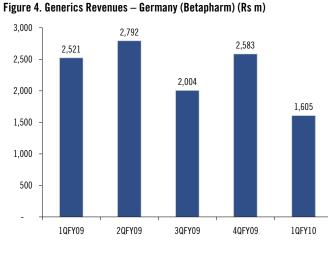
3

Update on Key Businesses

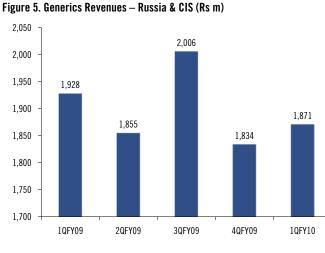
CIRA Comments

- 1QFY10 includes cUS\$43m (cRs2.1bn) from the AG sales of Imitrex (cUS\$73m and US\$70m in 3QFY09 & 4QFY09) – these sales will continue till mid August
- Market share of over 50% in generic Imitrex
- Excluding Imitrex, revenues grew by 42% YoY, driven by high volume growth in key products (21% in US\$ terms)
- Omeprazole OTC launch expected in Q2FY10. We expect this product to be a key growth driver in FY10
- Total 139 ANDAs filed in US with 67 pending approval 28 are Para IVs and 16 FTFs

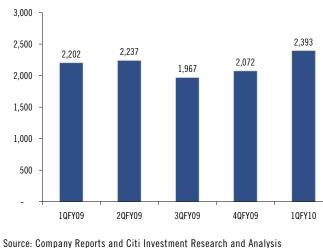
Source: Company Reports and Citi Investment Research and Analysis



Source: Company Reports and Citi Investment Research and Analysis



Source: Company Reports and Citi Investment Research and Analysis



4

Figure 6. Generics Revenues – India (Rs m)

CIRA Comments

- Revenues down 38% YoY on destocking ahead of the commencement of AOK tender supplies & withdrawal of olanzapine from the market
- Commenced supplies to AOK tender in 1QFY10
- Betapharm sales force reduced from 110 to 50. DRL incurred one time severance costs of €7.2m in 1QFY10
- Germany witnessing increased tender activities by other insurance companies. AOK tender for further 94 product in 2HCY09 – supplies expected to commence in Jan '10
- Headwinds in this market pose risk to FY10 guidance

Source: Company Reports and Citi Investment Research and Analysis

CIRA Comments

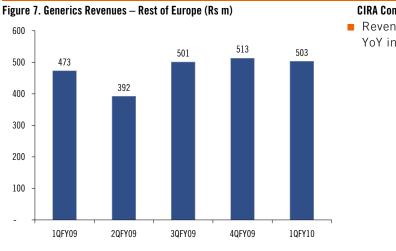
- Revenues from Russia up 2% YoY on the back of strong performance of key brands – up 18% in Rouble terms
- Volumes in the Russian market have degrown YoY due to inventory holding correction at the trade level as well as lack of liquidity in the market
- Robust secondary sales growth trends up 46% YoY in the months of April & May, ahead of industry growth rate of c34%
- Sales expected to improve from 3Q, which is a seasonally strong quarter

Source: Company Reports and Citi Investment Research and Analysis

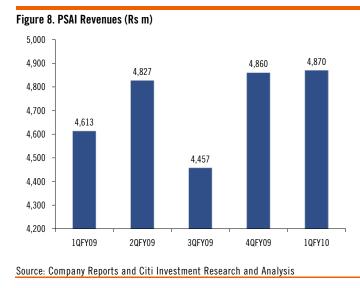
CIRA Comments

- Revenues up 9% YoY driven by growth in sales of major brands (Omez, Nise & Razo)
- 14 new products launched during the quarter
- Robust secondary sales growth trends up 11.4% YoY in the months of April & May, ahead of industry growth rate of c10%
- Changes implemented in supply chain progressing well

Source: Company Reports and Citi Investment Research and Analysis



Source: Company Reports and Citi Investment Research and Analysis



CIRA Comments

Revenues up 6% YoY at Rs503m largely driven by 23% YoY increase in UK sales

Source: Company Reports and Citi Investment Research and Analysis

CIRA Comments

- Revenues up 6% YoY at Rs4.9bn. DRL expects doubledigit growth rates for the rest of FY10
- Growth driven by launch of new products including Gemcitabine, Montelukast, Sumatriptan & Levetiracetam
- EU & RoW markets account for most of the growth. Sales from India and US declined YoY
- Order book up 27% YoY.
- 4 DMFs filed during the quarter; 355 DMF filings till date

Source: Company Reports and Citi Investment Research and Analysis

Dr Reddy

Company description

DRL is a leading pharma company in India, with one of the best R&D pipelines. It focuses on value addition by increasing the share of branded formulations and generics exports to regulated markets. After starting as a bulk-drugs player in 1984, it has moved up the value chain and is aiming to become an innovator company. In generics, it is trying to increase the share of sales from regulated markets to boost overall profitability. As part of its inorganic growth strategy, it acquired Betapharm in Germany and is looking at smaller deals going forward.

Investment strategy

5

We rate DRL Buy/Medium Risk. The company has evolved a business model that appears among the best placed to tackle the changing dynamics of the industry. Near-term growth drivers and investment for the longer-term

sustainability of growth make DRL one of the best Indian pharma companies, in our view. At the same time, DRL's presence in patent challenges and drug discovery implies the potential for positive surprises to earnings and valuations. While DRL has been caught on the wrong foot with its acquisition of Betapharm in Germany, given significant changes in regulations and market dynamics, its impact on the DRL's earnings power appears to be diminishing (c10% of FY11E gross profits vs. c17% of FY08 gross profits).

Valuation

Our target price for DRL is Rs825, which is based on a sum-of-the-parts valuation approach. We use a target multiple of 16x to value sector leaders, which is at a premium of about 5% to the broad market and seems justified given that the sector is IPR driven and has the potential for significant earnings growth despite the economic slowdown. We value DRL inline with other sector leaders with Russia faring better than our expectations and return ratios set to improve materially in FY10E. At 16x Jun 10E earnings, we value DRL's base business at Rs760. We value DRL's Para IV pipeline separately at Rs65 - including a Rs11 from Imitrex AG sales in FY10E. For the rest of the pipeline, we use a success probability of 35% and a discounted cash flow (discount factor 12.5%) for the opportunities being targeted over the next few years. Cumulatively, we arrive at a target price of Rs825.

Risks

6

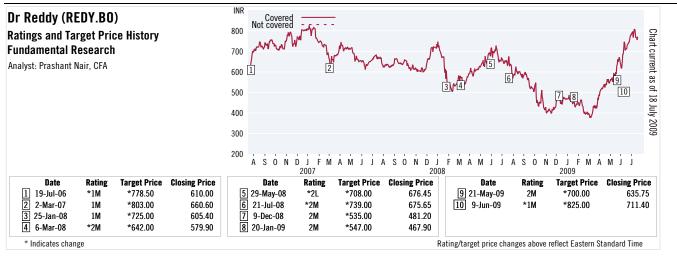
We rate DRL Medium Risk, which is in line with our quant-based risk rating system. Downside risks to our target price include: (1) DRL's ramp-up in sales and distribution in the US entails large investments; (2) Patent challenges are win-lose situations and often cause stock-price volatility; and (3) R&D success rates are low.

Appendix A-1

Analyst Certification

Each research analyst(s) principally 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. Each 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



Customers of the Firm in the United States can receive independent third-party research on the company or companies covered in this report, at no cost to them, where such research is available. Customers can access this independent research at http://www.citigroupgeo.com or http://www.smithbarney.com or can call (866) 836-9542 to request a copy of this research.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Dr Reddy. 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 Dr Reddy 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, securitiesrelated: Dr Reddy.

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: Dr Reddy.

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

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

Citi Investment Research Ratings Distribution			
Data current as of 30 Jun 2009	Buy	Hold	Sell
Citi Investment Research Global Fundamental Coverage	41%	38%	21%
% of companies in each rating category that are investment banking clients	46%	45%	39%

Guide to Fundamental Research Investment Ratings:

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

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

7

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

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

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

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

Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets India Private Limited

Prashant Nair, CFA,Akshay Rai

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 21 July 2009 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 department Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Investment Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existin

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. In addition to the disclosures on this research report and on the CIRA disclosure website (https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html), important disclosures regarding the relationship between the companies that are the subject of this report and Morgan Stanley Smith Barney LLC, Morgan Stanley or any of its affiliates, are available at www.morganstanley.com/researchdisclosures. This CIRA research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of CIRA. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts,

8

investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product 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, JI. 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 Italy by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Foro Buonaparte 16, Milan, 20121, Italy. If the Product was prepared by Citi Investment Research and distributed in Japan by Nikko Citigroup Limited ("NCL"), it is being so distributed under license. If the Product was prepared by NCL and distributed by Nikko Cordial Securities Inc. or Citigroup Global Markets Inc. it is being so distributed under license. NCL is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. In the event that an error is found in an NCL research report, a revised version will be posted on Citi Investment Research's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, 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. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in 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 NASD, NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Investment Research's Products can be found at www.citigroupgeo.com. 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 highvolatility 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

9

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.

© 2009 Citigroup Global Markets Inc. (© Nikko Citigroup Limited, if this Product was prepared by it). Citi Investment Research is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. 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. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. 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.

10

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST