

Company Focus

7 March 2008 | 9 pages

Dr Reddy (REDY.BO)

Downgrade to Hold: Growth Pangs

- Downgrade to Hold We downgrade Dr Reddy's from Buy to Hold as we reduce our target price by 11% to Rs642/share. Our target price cut stems from a lower multiple (18x v/s 20x earlier) to value its core business (due to near term uncertainties in Germany) & lower option value for Perlecan. Although long term initiatives hold promise, the German concerns would act as an overhang on valuations in the near term, in our view.
- Mixed outlook We expect DRL's well diversified business & expanding pipeline of products/markets in each segment to drive sustained growth over the long term. Besides, its efforts in biosimilars & innovative R&D would throw up valuation & growth drivers beyond the traditional generics opportunity. However, over the next few quarters, we expect the pain in German operations to continue and suppress overall earnings growth.
- Concerns in Germany DRL took a big write-off (Rs2.4bn) of intangibles related to Betapharm in 3QFY08. Although it has made good progress in shifting production to low cost Indian facilities, the regulatory pressure on pricing & growing bargaining power of insurance companies show no signs of easing in the near term and should keep profitability under pressure.
- Cut TP to Rs642/share We cut our target P/E on the base business to 18x (from 20x) due to the near term uncertainty on earnings & return ratios especially on concerns in Germany. We also shift to a more conservative valuation of its P-IV pipeline (down 15% to Rs27) & stake in Perlecan Pharma (down 35% to Rs26), as we raise our discounting rate to factor in the higher risk premium for equities.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2006A	929	12.11	337.6	47.9	2.0	4.3	0.6
2007A	9,328	55.55	358.6	10.4	2.3	29.2	0.7
2008E	4,195	24.99	-55.0	23.2	2.2	9.7	0.8
2009E	5,786	34.46	37.9	16.8	2.0	12.2	0.8
2010E	7,032	41.88	21.5	13.8	1.7	13.3	0.8

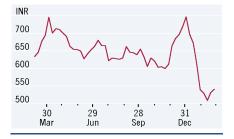
Source: Powered by dataCentral

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

Change in opinion 교 Rating change 교 Target price change 교

Hold/Medium Risk	2 M
from Buy/Medium Risk	
Price (05 Mar 08)	Rs579.90
Target price	Rs642.00
from Rs725.00	
Expected share price return	10.7%
Expected dividend yield	0.7%
Expected total return	11.4%
Market Cap	Rs97,523M
	US\$2,425M

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



Prashant Nair, CFA¹

+91-22-6631-9855 prashant.nair@citi.com

Chirag Dagli¹

+91-22-6631-9874 chirag.dagli@citi.com

Akshay Rai¹ akshay.rai@citi.com

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

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.smithbarney.com (for retail clients) or http://www.citigroupgeo.com (for institutional clients) or can call (866) 836-9542 to request a copy of this research.

¹Citigroup Global Markets India Private Limited

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	47.9	10.4	23.2	16.8	13.8
EV/EBITDA adjusted (x)	147.4	5.4	10.7	8.9	7.1
P/BV (x)	2.0	2.3	2.2	2.0	1.7
Dividend yield (%)	0.6	0.7	0.8	0.8	0.8
Per Share Data (Rs)					
EPS adjusted	12.11	55.55	24.99	34.46	41.88
EPS reported	12.11	55.55	25.83	34.46	41.88
BVPS	290.40	247.62	267.43	296.71	333.42
DPS	3.50	4.00	4.50	4.50	4.50
Profit & Loss (RsM)					
Net sales	23,562	65,095	49,509	57,844	62,114
Operating expenses	-23,404	-54,528	-47,006	-51,494	-54,183
EBIT	158	10,567	2,504	6,350	7,931
Net interest expense	1,118	-3	832	400	400
Non-operating/exceptionals	-88	-63	-8	-60	-60
Pre-tax profit	1,188	10,501	3,328	6,690	8,271
Тах	-258	-1,177	865	-906	-1,241
Extraord./Min.Int./Pref.div.	-1	4	143	2	2
Reported net income	929	9,328	4,336	5,786	7,032
Adjusted earnings	929	9,328	4,195	5,786	7,032
Adjusted EBITDA	578	13,908	6,355	7,650	9,231
Growth Rates (%)	01.0	170.0	00.0	10.0	7.4
Sales	21.0	176.3	-23.9	16.8	7.4
EBIT adjusted	29.7	nm	-76.3	153.6	24.9
EBITDA adjusted EPS adjusted	22.1 337.6	nm 358.6	-54.3 -55.0	20.4 37.9	20.7 21.5
Cash Flow (RsM)	007.0		00.0	07.0	
Operating cash flow	1,039	4,683	-1,585	2,991	5,601
Depreciation/amortization	420	3,341	3,851	1,300	1,300
Net working capital	-1,873	-4,265	-5,923	-2,797	-1,433
Investing cash flow	-34,524	-4,102	-900	-900	-900
Capital expenditure	-1,873	-3,341	-900	-900	-900
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	27,211	6,279	-869	-869	-869
Borrowings	6,322	-3,066	0	0	0
Dividends paid	-436	-758	-869	-869	-869
Change in cash	-6,274	6,861	-3,354	1,222	3,832
Balance Sheet (RsM)					
Total assets	68,768	85,919	85,849	91,453	97,970
Cash & cash equivalent	5,334	18,603	15,108	16,330	20,162
Accounts receivable	4,802	7,519	9,156	10,697	11,487
Net fixed assets	9,086	12,428	13,328	14,228	15,128
Total liabilities	46,496	44,330	40,932	41,617	41,968
Accounts payable	3,639	4,755	4,069	4,754	5,105
Total Debt	30,995	24,754	22,041	22,041	22,041
Shareholders' funds	22,272	41,578	44,905	49,822	55,985
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	2.5	21.4	12.8	13.2	14.9
ROE adjusted	4.3	29.2	9.7	12.2	13.3
ROIC adjusted	-0.8	54.0	15.5	21.3	23.4
Net debt to equity Total debt to capital	115.2 58.2	14.8 37.3	15.4 32.9	11.5 30.7	3.4 28.2

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



We downgrade Dr Reddy's from Buy to Hold as we reduce our target price by 11% to Rs642/share. Our target price cut stems from a lower multiple (18x v/s 20x earlier) to value its core business (due to near term uncertainties in Germany) & lower option value for Perlecan. Although long term initiatives hold promise, the German concerns would act as an overhang on valuations in the near term in our view.

What has changed?

Our downgrade stems from the following factors:

Uncertainty persists on Germany: While we believe that DRL's acquisition of Betapharm in Germany is a right move over the long term from the strategic perspective, it has been caught on the wrong foot by the significant changes in regulations and market dynamics. Although these concerns are not new, the impact of these on the company's earnings power appears to be much higher than we had anticipated earlier.

In 3QFY08, DRL took another big write-off (Rs2.4bn) of intangibles related to Betapharm (the first one being a Rs1.8bn charge taken in 4QFY07). Although supply constraints under its sourcing contract with Solutas is a thing of the past and DRL has made good progress in shifting production to low cost Indian facilities (4 products already being supplied out of India), the benefits are being offset by the higher rebates being demanded by insurance companies. With another round of price cuts expected around April 2008 and the bargaining power of insurance companies unlikely to ease, we believe it would take time for the company to strike a balance between the need to have a sales force on the ground and the profitability of the business.

Overall, we believe that as the business transforms to a generic generic market from a branded generics one, earnings would no longer command the same multiple that it used to in the past.

Some duress in Perlecan Pharma: We have been building in some option value for DRL's holding in Perlecan Pharma. However, Perlecan has faced some setbacks on its R&D portfolio. The data on RUS-3108 has thrown up safety concerns and the molecule appears likely to be dropped. At the same time, the company has also taken DRL-10945 out of the purview of Perlecan Pharma, given the higher risk profile of the compound in light of recent indications from the FDA. This leaves only two molecules in Perlecan Pharma (v/s 4 earlier) and implies a lower value for the firm. We have made appropriate changes to our valuation for DRL's stake in Perlecan – reducing it to Rs26/share from Rs35/share earlier.

Reducing Target Price to Rs642/share

We lower our target price by 11% to Rs642/share on the back of the following factors:

 We cut our target P/E on the base business to 18x (from 20x) due to the near term uncertainty on earnings & return ratios – especially on concerns in Germany. We now value the core business at Rs589/share (down 12% from Rs659/share earlier)

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. We also shift to a more conservative valuation of its P-IV pipeline (down 15% to Rs27) & stake in Perlecan Pharma (down 35% to Rs26), as we account for the setbacks faced in the latter and factor in the raise our discounting rate to factor in the higher risk premium for equities.

Dr Reddy

Investment strategy

We rate DRL Hold/Medium Risk. The company has evolved a business model that is 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 makes DRL one of the best companies in the Indian pharma industry, 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. However, our positive view is tempered by DRL being caught on the wrong foot with its acquisition of Betapharm in Germany, given significant changes in regulations and market dynamics. Although these concerns are not new, the impact on the DRL's earnings power appears to be much higher than we had originally anticipated.

Valuation

Valuing DRL is a challenge as it has a high exposure to patent challenges and NCE research, where costs are front ended and returns likely to come through in future. As such, a pure P/E based approach would be insufficient and we use sum-of-the-parts valuation approach. We use a target multiple of 20x to value sector leaders, which is at a premium of about 40% to the broad market and seems justified given that the sector is IPR driven and has the potential for significant earnings growth. However, we value Dr.Reddy's at a 10% discount due to the near term uncertainty on earnings & return ratios – especially on concerns in Germany. At 18x March '09E earnings, we value DRL's base business at Rs589/ share. We value DRL's Para IV pipeline and drug discovery efforts separately at Rs27/share. For patent challenges, we use a success probability of 25% and a discounted cash flow (discount factor 15%) for the opportunities being targeted over the next few years. We value DRL's new drug discovery efforts in Perlecan Pharma at Rs26/share to account for the setback in one of the four molecules under development. Together, these values give us a target price of Rs642.

Risks

4

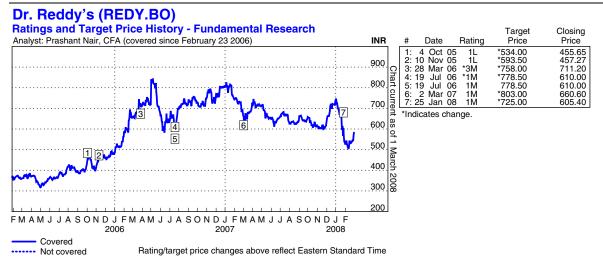
We rate the DRL Medium Risk in recognition of the steady growth of the base business and the longer-term potential for cash flows from research-based opportunities. Downside risks to our target price include: (1) DRL's ramp-up in sales and distribution in the US market entails large investments; (2) Patent challenges are win-lose situations and often cause stock-price volatility; and (3) R&D success rates are low. Upside risks include: (1) better than expected performance in Germany either due to lower pricing pressure or higher savings on sourcing from India could lead to an upside to our earnings estimates and target price; (2) any success achieved in either its NCE R&D program or any of its patent challenges could act as a positive catalyst

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.smithbarney.com (for retail clients) or http://www.citigroupgeo.com (for institutional clients) or can call (866) 836-9542 to request a copy of this research.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Dr. Reddy's.

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

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

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

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

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

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

Citi Investment Research Ratings Distribution						
Data current as of 31 December 2007	Buy	Hold	Sell			
Citi Investment Research Global Fundamental Coverage (3421)	50%	37%	12%			
% of companies in each rating category that are investment banking clients	52%	53%	40%			

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).

6

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

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

Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

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

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

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 05 March 2008 04:00 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Dr. Reddy's. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

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

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

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. Smith Barney clients can ask their Financial Advisor for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citi Smith Barney Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação Associação Asanalistas 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)

7

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 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, which is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd. (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 Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in 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 Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in U.A.E. by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. DIFC, Bldg 2, Level 7, PO Box 506560, Dubai, UAE. 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 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.

© 2008 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 registered throughout the world. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and

may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the addresses 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