

## Company Flash

20 April 2007 | 9 pages

# Wipro (WIPR.BO)

## Buy: In-Line 4Q; Muted Guidance

- 4Q FY07 results in line** — Wipro reported in-line 4Q FY07 results – revenues of US\$691m and EBIT of Rs7.1bn for Global IT Services were in line with our expectations. Consolidated net profit at Rs.8.6bn (est. Rs7.7bn) was higher than expectation due to higher other income and a lower tax rate.
- Guidance muted** — Wipro guided to US\$711m revenues for 1Q FY08, implying growth of 3% qoq for Global IT Services. While 1Q guidance has historically been weak (avg. 5.4% qoq for the last four years), the guidance this time around looks even more muted.
- Pricing trend in line with sector** — Wipro witnessed ~60-70bp improvement in pricing in 4Q, in line with sector trends. All the large companies have reported ~60-200bp improvement in pricing on a sequential basis for 4Q.
- BPO back to robust growth trajectory** — BPO delivered a solid quarter after a long time; revenue growth was 12.4% qoq and EBIT margins improved to 25%, up 280bp qoq.
- Telecom OEM business visibility low** — Over the past few quarters, Wipro's growth has been impacted by restructuring/M&A at a couple of large clients in the Telecom OEM space. Management indicated that visibility on this part of the business is still low.
- Maintain Buy/Low Risk** — While 4Q numbers were in line, the guidance does look muted. The stock trades at 23.5x FY08E, maintain Buy/Low risk rating.

<b>Buy/Low Risk</b>	<b>1L</b>
Price (20 Apr 07)	Rs588.80
Target price	Rs730.00
Expected share price return	24.0%
Expected dividend yield	1.4%
<b>Expected total return</b>	<b>25.3%</b>
Market Cap	Rs858,837M US\$20,490M

### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2005A	15,834	11.33	57.6	52.0	14.4	30.7	0.4
2006A	20,270	14.08	24.3	41.8	10.6	29.9	0.8
2007E	28,317	19.53	38.7	30.1	9.1	33.1	1.4
2008E	36,296	25.04	28.2	23.5	7.4	35.1	1.7
2009E	44,894	30.97	23.7	19.0	5.9	35.0	2.0

Source: Powered by dataCentral

### Surendra Goyal, CFA<sup>1</sup>

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

### Hitesh Shah<sup>1</sup>

 +91-22-6631-9872  
 hitesh.b.shah@citigroup.com

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

Citigroup 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.

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.

<sup>1</sup>Citigroup Global Market India Private Limited

<http://deadpresident.blogspot.com>

### Other key points

#### Global IT services

- Volume growth of 5.4%: IT Services volumes increased 5.4% qoq while pricing was up ~70bp.
- Gross margin increases ~110bps: Gross margins for IT Services improved ~110bps due to improved pricing, profitability of BPO, profitability of acquisitions (+11% improvement qoq) despite the onsite wage increases taken during the quarter.
- EBIT margins down 40bps: Higher SG&A (+100bp qoq) was the key reason for EBIT margins declining 40bp qoq.
- Net profit at Rs8.6bn, up 15.6% qoq: Higher other income at Rs980m and a lower tax rate of 6.5% against 12.7% in 3Q (despite higher other income) resulted in net profits increasing by 15.6% qoq. Management indicated that this quarter saw tax write-backs of Rs700m.
- Addition of ~1600 employees: Wipro Global IT services added ~1600 employees in 4Q with ~1000 employees in IT Services and ~600 employees in BPO. Wipro's IT Services business has added ~34% employees in the past twelve months.
- Offshore utilization up: Offshore utilization improved 200bps to 60.4% while onsite utilization remained flat at 95%. BPO hiring dipped sharply to 63% (68% in 3Q).
- Telecom OEM business still not picking up: The telecom OEM business outlook has not changed much since the last quarter; visibility still continues to be low.

#### Other businesses

- Asia Pac IT continues to deliver: Asia Pacific IT delivered 47% yoy growth with revenues of Rs7.8bn for the quarter. EBITDA margins improved 90bp to 9.9% yoy.
- Consumer business does well: Consumer business witnessed growth of 42% yoy to Rs2.1bn. EBITDA margins improved 120bp yoy to 16.8%.

#### Guidance

- 1Q guidance muted: Wipro's 1Q guidance of US\$711m implies growth of 3% qoq. The guidance is muted even compared with a historical weak Q1 guidance trend for Wipro.

<http://deadpresident.blogspot.com>

Figure 1. Key Financials

	4Q06	3Q07	4Q07	QoQ	YoY
Revenue (US\$ m)	677	885	984	11.2%	45.3%
Revenue	30,542	39,636	43,345	9.4%	41.9%
Cost of revenue	21,059	27,360	29,817	9.0%	41.6%
Gross profit	9,482	12,276	13,528	10.2%	42.7%
Gross margin	31.0%	31.0%	31.2%	24bp	16bp
Operating expenses	3,278	4,362	5,332	22.2%	62.7%
Forex gains/(losses)	212	-211	-9	n.a.	n.a.
<b>EBIT</b>	<b>6,416</b>	<b>7,703</b>	<b>8,187</b>	<b>6.3%</b>	<b>27.6%</b>
<b>EBIT margin</b>	<b>21.0%</b>	<b>19.4%</b>	<b>18.9%</b>	<b>-55bp</b>	<b>-212bp</b>
Depreciation and amortization	838	1,096	1,105	0.8%	31.8%
<b>EBITDA</b>	<b>7,255</b>	<b>8,799</b>	<b>9,292</b>	<b>5.6%</b>	<b>28.1%</b>
<b>EBITDA margin</b>	<b>23.8%</b>	<b>22.2%</b>	<b>21.4%</b>	<b>-76bp</b>	<b>-232bp</b>
Other income	402	705	983	39.5%	144.6%
Profit before tax	6,818	8,408	9,170	9.1%	34.5%
Income tax expense	898	1,080	596	-44.8%	-33.7%
Income from operations	5,920	7,328	8,575	17.0%	44.8%
Affiliates/Minority	54	121	39	-67.7%	-27.5%
Net profit	5,974	7,450	8,614	15.6%	44.2%
EPS - basic	4.22	5.21	6.04	15.8%	42.9%
EPS - fully diluted	4.15	5.14	5.96	16.0%	43.6%

Source: Company Reports

Figure 2. Key Financials (Rs in Millions)

	4Q06	3Q07	4Q07	QoQ	YoY
Revenue (US\$ m)	512	641	691	7.8%	34.8%
Revenue	23,104	28,674	30,419	6.1%	31.7%
Cost of revenue	15,193	19,041	19,873	4.4%	30.8%
Gross profit	7,911	9,634	10,546	9.5%	33.3%
Gross margin	34.2%	33.6%	34.7%	107bp	43bp
Operating expenses	2,254	2,801	3,416	22.0%	51.5%
Forex gains/(losses)	212	-211	-9	n.a.	n.a.
<b>EBIT</b>	<b>5,657</b>	<b>6,833</b>	<b>7,130</b>	<b>4.3%</b>	<b>26.1%</b>
<b>EBIT margin</b>	<b>24.5%</b>	<b>23.8%</b>	<b>23.4%</b>	<b>-39bp</b>	<b>-104bp</b>
Depreciation and amortization	744	954	982	2.9%	31.9%
<b>EBITDA</b>	<b>6,401</b>	<b>7,787</b>	<b>8,112</b>	<b>4.2%</b>	<b>26.7%</b>
<b>EBITDA margin</b>	<b>27.7%</b>	<b>27.2%</b>	<b>26.7%</b>	<b>-49bp</b>	<b>-104bp</b>

Source: Company Reports

<http://deadpresident.blogspot.com>

Figure 3. Key HR and Execution metrics – IT Services

	1Q07	2Q07	3Q07	4Q07
Delivery employees	40,496	45,824	45,824	45,824
- net add	2,841	5,328	3,489	1,041
Support staff	2,518	2,997	3,304	4,041
Sales staff	257	294	317	340
<b>Utilization (inc trainees)</b>				
- Onsite	95.0%	95.0%	95.0%	95.0%
- Offshore	64.8%	61.1%	58.4%	60.4%
- blended	72.0%	69.0%	67.0%	68.0%
<b>Available effort</b>				
Total delivery	104,918	117,920	133,591	137,162
- Onsite	24,380	27,059	29,617	31,064
- Offshore	80,538	90,861	103,974	106,098
Support	7,554	8,991	9,912	12,123
Total	112,472	126,911	143,503	149,285
<b>Billed effort</b>				
Onsite	23,161	25,706	28,136	29,511
Offshore	52,184	55,555	60,689	64,068
Total	75,345	81,261	88,825	93,579
<b>Billed effort distribution</b>				
Onsite	30.7%	31.6%	31.7%	31.5%
Offshore	69.3%	68.4%	68.3%	68.5%
<b>Realization per employee (\$/person-month)</b>				
Onsite	10,979	11,058	11,012	11,254
Offshore	4,251	4,206	4,189	4,214

Source: Company Reports

Figure 4. Key HR and Execution metrics – BPO Services

	1Q07	2Q07	3Q07	4Q07
Delivery employees	15,939	15,355	16,863	17,464
- net add	-148	-584	1,508	601
Support staff	548	639	756	834
<b>Utilization</b>				
- employee	66%	70%	68%	63%
- shift	122%	119%	-	-
Seats - available	13,099	12,923	-	-
Seats - occupied	10,897	11,236	-	-

Source: Company Reports

<http://deadpresident.blogspot.com>

Figure 5. Revenue Mix

	1Q07	2Q07	3Q07	4Q07
<b>Service Mix</b>				
Technology Infrastructure Services	9.6%	10.0%	11.1%	11.5%
Testing	10.7%	11.1%	11.0%	11.0%
Package Implementation	10.7%	10.8%	11.3%	11.9%
Consulting	1.0%	1.0%	1.1%	1.1%
BPO	8.4%	8.4%	8.3%	8.6%
ADM	59.6%	58.7%	57.2%	55.9%
<b>Vertical Mix</b>				
Telecom, embedded & product engg	29.1%	28.8%	27.5%	26.5%
Telecom service providers	7.0%	6.8%	6.5%	6.6%
Technology Business	36.1%	35.6%	34.0%	33.1%
Financial services	22.4%	22.6%	22.7%	22.9%
Retail	8.4%	9.7%	9.7%	10.0%
Utilities	9.1%	8.0%	9.8%	10.3%
Manufacturing	9.3%	9.1%	9.0%	9.3%
Corporate/govt.	11.5%	11.8%	11.6%	11.2%
Others	3.2%	3.2%	3.1%	3.2%
Enterprise Business	63.9%	64.4%	65.9%	66.9%
<b>Geographic Mix</b>				
North America	64.9%	64.7%	63.9%	63.8%
Europe	30.6%	30.1%	31.6%	31.1%
Japan	3.2%	3.7%	3.3%	3.2%
RoW	1.3%	1.5%	1.5%	1.9%

Source: Company Reports

Figure 6. Key client metrics

	1Q07	2Q07	3Q07	4Q07
<b>Client relationship</b>				
Total active clients	580	612	606	620
New clients	62	54	37	44
<b>Relationship size</b>				
\$1M+	233	243	253	262
\$1M-\$3M	104	104	107	117
\$3M-\$5M	35	37	45	37
\$5M-\$10M	36	37	31	35
\$10M-\$20M	26	30	31	33
\$20M+	32	35	39	40
<b>Client concentration</b>				
Top customer	3.5%	3.3%	3.2%	3.0%
Top 5	15.0%	14.4%	14.3%	14.0%
Top 10	25.9%	24.7%	24.5%	24.1%

Source: Company Reports

<http://deadpresident.blogspot.com>

## Wipro

### Company description

Wipro is India's leading Indian company with business interests in IT and BPO services exports, domestic hardware, consumer lighting and consumer care. It has one of the widest range of services, including systems integration, IT-enabled services, package implementation, software application development and maintenance, and R&D services. Wipro is the first P CMM Level 5 and SEI CMM Level 5 certified IT services company in the world. It has close to 600 clients spanning the BFSI, Manufacturing, Retail, Utilities and Telecom verticals. Its IT services exports team has more than 49,000 employees and BPO operation has around 16,000 employees.

### Investment thesis

We rate Wipro as Buy/Low Risk (1L) with a target price of Rs730. Being one of the top three Indian IT services firms, Wipro looks well positioned to benefit from the growing demand for offshore IT services. Apart from economies of scale in offshore delivery, one of Wipro's key strengths is its full-service model. This includes a strong position in the infrastructure/R&D services business, which offers significant long-term growth potential. It has strong exposure to the BPO segment, which should offer above-average growth in the long term. Wipro's management has actively pursued acquisitions to strengthen its service portfolio. We expect Wipro's global IT revenues to grow above the industry average rates over the next 2-3 years. We believe wage inflation will be largely offset by gains from improved employee mix, an improving offshore-onsite ratio and better utilization. We expect a 31.7% revenue CAGR and 30.1% EPS CAGR over FY06-09. For the global IT business, we expect a 30.8% revenue CAGR.

### Valuation

Our 12-month target price of Rs730 is based on 26x average FY08E-09E EPS — an 8% discount to our target multiple for Infosys. Our target multiple is supported by a P/E-band analysis of Wipro's historical trading pattern and peer group valuations. Over the past five years, Wipro has traded at an average one-year rolling P/E of 27.5x. Because of its small free float, strong exposure to R&D services and a model leveraged to large SI and IT outsourcing deals, Wipro has historically (over the past five years) traded at an average premium of about 22% to Infosys. But now Wipro has started trading at a discount to Infosys due to Wipro's lower growth and RoIC/RoE in the recent past. We think Wipro will continue to trade at a marginal discount to Infosys given expected sub-par growth vs. Infosys in the coming years. We believe P/E is the most appropriate valuation measure given Wipro's profitability and strong earnings visibility. Our target price is also supported by a FY08E Price/Sales multiple of 4.9x, which is within the stock's historical trading range of 3-6x.

### Risks

Although our quantitative risk-rating system suggests Medium Risk for Wipro, we rate Wipro as Low Risk given its diversified services and vertical portfolio. This is in line with our risk ratings for other large peer-group companies in our coverage universe. The key downside risks to our target price include: high exposure to the telecom/tech sectors (36% of total); risks to earnings from a sharp US slowdown; any significant appreciation of the rupee against the US Dollar/Euro/GBP; a sharp slowdown in the US economy; a slowdown in the banking, financial services and insurance (BFSI) sector; H1B visa quotas; and acquisition-related risks.

## Appendix A-1

### Analyst Certification

We, Surendra Goyal, CFA and Hitesh Shah, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

### IMPORTANT DISCLOSURES

#### Wipro (WIPR.BO)

#### Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal (covered since October 5 2006)



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 an affiliate received compensation for products and services other than investment banking services from Wipro in the past 12 months.

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: Wipro.

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: Wipro.

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.

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

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citigroup Investment Research product ("the Product"), please contact Citigroup 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](http://www.citigroupgeo.com). Private Client Division clients should refer to [www.smithbarney.com/research](http://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.

#### Citigroup Investment Research Ratings Distribution

Data current as of 31 March 2007

	Buy	Hold	Sell
Citigroup Investment Research Global Fundamental Coverage (3215)	45%	40%	15%
% of companies in each rating category that are investment banking clients	45%	42%	32%
India -- Asia Pacific (130)	58%	14%	28%
% of companies in each rating category that are investment banking clients	42%	50%	42%

#### Guide to Fundamental Research Investment Ratings:

Citigroup 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).

**Investment ratings** are a function of Citigroup 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.

<http://deadpresident.blogspot.com>

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:

Citigroup 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 Citigroup 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 Citigroup 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://www.sd.ny.ssb.com/> using the "Indexes" tab; Hold/Neutral Weight -- 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 sector of the Citigroup indexes.

---

#### OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 20 April 2007 10:24 AM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Wipro. (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](http://www.citigroupgeo.com).)

Citigroup Global Markets Inc. or its affiliates holds a long position in any class of common equity securities of Wipro.

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 the Product. Although Citigroup Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citigroup 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 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.

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 Citigroup Wealth Advisors 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



<http://deadpresident.blogspot.com>

Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. 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 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. If the Product was prepared by Citigroup Investment Research and distributed in Japan by Nikko Citigroup Ltd., it is being so distributed under license. Nikko Citigroup Limited is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Akasaka Park Building, 2-20, Akasaka 5-chome, Minato-ku, Tokyo 107-6122. 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., 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 Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartościowych 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 Gashka 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 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 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 Citigroup Investment Research's Products can be found at [www.citigroupgeo.com](http://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 be illegal. 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. Advice in the Product 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.

© 2007 Citigroup Global Markets Inc. Citigroup Investment Research is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. Citigroup and the Umbrella Device are trademarks and service marks of Citigroup or 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. 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