

Indian IT Services

Stock Sell-off factors in macro risks, time to accumulate

Indian IT stocks have seen a sharp sell-off in the last couple of weeks since the Lehman bankruptcy and continued stress on financial institutions globally. While some investor concern is warranted, we believe the share price drop has been excessive, driven to some extent by panic and forced selling (liquidation of portfolios). First, the Indian IT outsourcing model remains intact and should in fact gain market share in a global slowdown akin to in 2001-2003. Second, Indian IT stocks are now trading close to their trough P/Es achieved in the 2001-2003 downturn, indicating high investor pessimism. Further, these estimates do not factor in recent Rupee depreciation. While near-term news flow is difficult to predict, we believe this is the right time to accumulate large Indian IT stocks on a 9-to-12-month horizon – Infosys, Satyam, and TCS are our top picks.

- We expect Indian IT companies to gain market share in an economic slowdown, as they did in 2001-2003: While we agree that business from some large financial institutions will be hurt, a host of other customers are likely to increase offshoring due to IT spend pressures. Even the large financial institutions should offshore a much larger proportion of their budgets over time given cost advantages.
- Valuations for Indian IT are close to their historical troughs achieved in 2001-2003. However the crucial question today is investor belief in current consensus estimates: With the economic uncertainty around, there might be a case to call for a 5-10% cut to current consensus estimates as pricing comes off and volume growth slows. This should be more than made up for by Rupee/US\$ depreciation. As of now, based on Bloomberg consensus, FY10E EPS growth is 15-17% for large companies, implying an FY10E P/E of 8-12x.
- We expect 2Q FY09 earnings to be largely in line with consensus, along with in-line 3Q FY09 guidance that should allay concerns about a near-term business slowdown: However, the FY10 outlook remains uncertain as of now. We would like to re-state that despite the recent sell-off, Indian IT stocks have performed in line with the Indian market YTD in 2008, with Infosys and Satyam outperforming the Sensex by 17% and 3% respectively.

India eBusiness/IT Services Manoj Singla, CFA^{AC}

(91-22) 6639-3017/(44-20) 7325-1191 manoj.singla@jpmorgan.com

J.P. Morgan India Private Limited

Nishit Jasani

(91-22) 6639-3008 nishit.x.jasani@jpmorgan.com

J.P. Morgan India Private Limited

Bhavin Shah

(852) 2800-8538 bhavin.a.shah@jpmorgan.com

J.P. Morgan Securities (Asia Pacific) Limited

Absolute and relative share price performance

Absolute	YTD	In Sep '08
performance		
Sensex	-38%	-13%
Infosys	-21%	-19%
TCS	-43%	-24%
Wipro	-35%	-21%
Satyam	-35%	-31%
HCL Tech	-41%	-19%
Relative	YTD	In Sep '08
performance		
Infosys	17%	-6%
TCS	-5%	-11%
Wipro	3%	-8%
Satyam	3%	-18%
HCL Tech	-3%	-6%

Source: Datastream

Consensus EPS estimates and P/E values

			EPS			EPS Growth		EPS CAGR		P/E		
	Price (Rs)	FY08	FY09E	FY10E	FY11E	FY09E	FY10E	FY11E	FY08-11E	FY09E	FY10E	FY11E
Infosys	1393.3	78.6	102.0	118.6	133.0	30%	16%	12%	19%	13.7	11.8	10.5
TCS	620.0	51.3	59.7	69.2	78.0	16%	16%	13%	15%	10.4	9.0	8.0
Wipro	343.1	22.4	26.8	31.4	34.2	20%	17%	9%	15%	12.8	10.9	10.0
Satyam	293.1	25.2	32.5	37.4	40.3	29%	15%	8%	17%	9.0	7.8	7.3

Source: Bloomberg

See page 9 for analyst certification and important disclosures, including non-US analyst disclosures.

J.P. Morgan 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 J.P. Morgan 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 www.morganmarkets.com or can call 1-800-477-0406 toll free to request a copy of this research.



Valuations - Stocks close to historical troughs

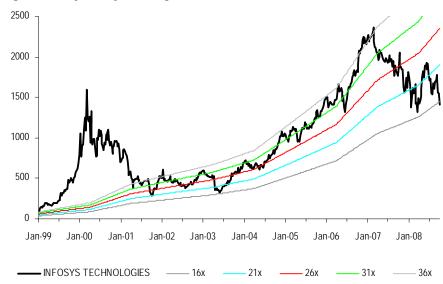
Table 1: Infosys: Consensus EPS estimates and P/E values

									EPS			
			EPS ((Rs)		E	PS growth		CAGR		P/E (x)	
YE Mar.	Price (Rs)	FY08	FY09E	FY10E	FY11E	FY09E	FY10E	FY11E	FY08-11E	FY09E	FY10E	FY11E
Infosys	1393.3	78.6	102.0	118.6	133.0	30%	16%	12%	19%	13.7	11.8	10.5

Source: Bloomberg

Infosys is trading at 12.7x oneyear forward P/E and 15.5x oneyear trailing P/E. This is below its historical trough of 13x forward P/E

Figure 1: Infosys: One-year trailing P/E



Source: Company data, Datastream, JPMorgan estimates.

Figure 2: Infosys: One-year forward P/E

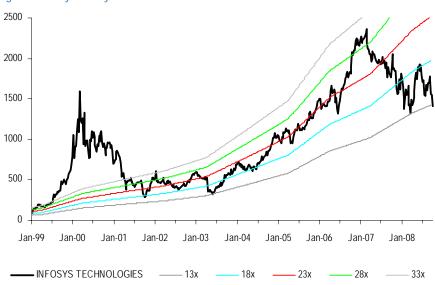




Table 2: Tata Consultancy Services: Consensus EPS estimates and P/E values

									EPS			
			EPS ((Rs)		E	PS growth		CAGR		P/E (x)	
YE Mar.	Price (Rs)	FY08	FY09E	FY10E	FY11E	FY09E	FY10E	FY11E	FY08-11E	FY09E	FY10E	FY11E
TCS	620.0	51.3	59.7	69.2	78.0	16%	16%	13%	15%	10.4	9.0	8.0

Source: Bloomberg

TCS is trading at 9.7x one-year forward P/E and 11.1x one-year trailing P/E

This is below its historical trough of 12x forward P/E

Figure 3: TCS: One-year trailing P/E



Source: Company data, Datastream, J.P. Morgan estimates.

Figure 4: TCS: One-year forward P/E





Table 3: Wipro: Consensus EPS estimates and P/E values

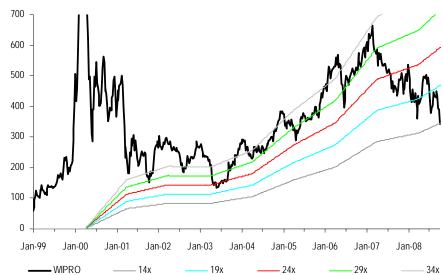
									EPS			
			EPS (Rs)		E	PS growth		CAGR		P/E (x)	
YE Mar.	Price (Rs)	FY08	FY09E	FY10E	FY11E	FY09E	FY10E	FY11E	FY08-11E	FY09E	FY10E	FY11E
Wipro	343.1	22.4	26.8	31.4	34.2	20%	17%	9%	15%	12.8	10.9	10.0

Source: Bloomberg

Wipro is trading at 11.8x oneyear forward P/E and 14x oneyear trailing P/E

Its previous historical trough was 12.7x forward P/E

Figure 5: Wipro: One-year trailing P/E



Source: Company data, Datastream, J.P. Morgan estimates.

Figure 6: Wipro: One-year forward P/E

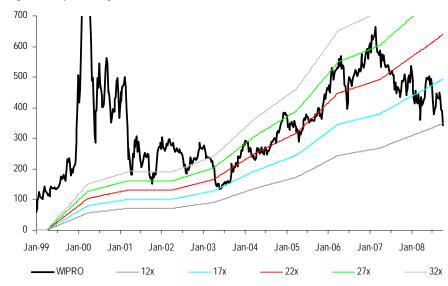




Table 4: Satyam: Consensus EPS estimates and P/E values

						EPS			EPS			
		EPS				Growth			CAGR	P/E		
YE Mar.	Price (Rs)	FY08	FY09E	FY10E	FY11E	FY09E	FY10E	FY11E	FY08-11E	FY09E	FY10E	FY11E
Satyam	293.1	25.2	32.5	37.4	40.3	29%	15%	8%	17%	9.0	7.8	7.3

Source: Bloomberg

Figure 7: Satyam: One-year trailing P/E



year trailing P/E This is below its recent trough of

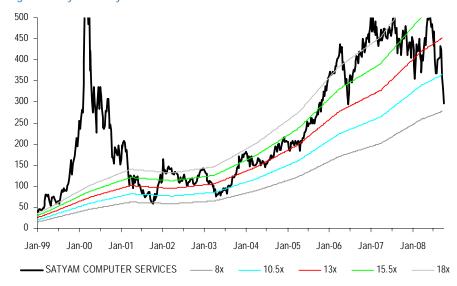
12x forward P/E and FY03 trough of ~10x forward P/E

Satyam is trading at 8.5x oneyear forward P/E and 10.2x one-

Satyam has net cash of Rs69/share based on its June-08 reported balance sheet

Source: Company data, Datastream, J.P. Morgan estimates.

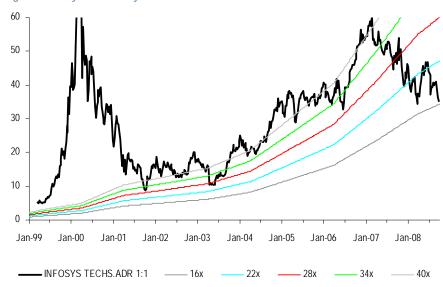
Figure 8: Satyam: One-year forward P/E





Even ADR P/Es are at trough valuations

Figure 9: Infosys: ADR one-year forward P/E



Source: Company data, Datastream, J.P. Morgan estimates.

Figure 10: Satyam: ADR one-year forward P/E





Rupee movement against major currencies

Figure 11: INR USD exchange rate



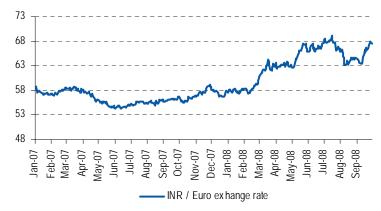
Source: Datastream

Figure 12: INR GBP exchange rate



Source: Datastream

Figure 13: INR Euro exchange rate



Source: Datastream



110 100 90 80 70 60 50 14-Jan-08 28-Jan-08 2-Jun-08 14-Jul-08 11-Aug-08 25-Aug-08 8-Sep-08 16-Jun-08 22-Sep-08 31-Dec-07 30-Jun-08 11-Feb-08 25-Feb-08 Infosys —— TCS —— Wipro —— Satyam —

Figure 14: Share price performance of top-tier Indian IT companies (re-based to 100)

Source: Datastream

Table 5: Absolute and relative share price performance

Absolute performance	YTD	In Sep '08
Sensex	-38%	-13%
Infosys	-21%	-19%
TCS	-43%	-24%
Wipro	-35%	-21%
Satyam	-35%	-31%
HCL Tech	-41%	-19%
Relative performance	YTD	In Sep '08
Infosys	17%	-6%
TCS	-5%	-11%
Wipro	3%	-8%
Satyam	3%	-18%
HCL Tech	-3%	-6%

Source: Datastream



Companies Recommended in This Report (all prices in this report as of market close on 29 September 2008) HCL-Technologies (HCLT.BO/Rs195.80/Neutral), Infosys Technologies (INFY.BO/Rs1,391.95/Overweight), Satyam Computers (SATY.BO/Rs292.55/Overweight), Tata Consultancy Services (TCS.BO/Rs619.65/Overweight), Wipro Ltd. (WIPR.BO/Rs343.10/Overweight)

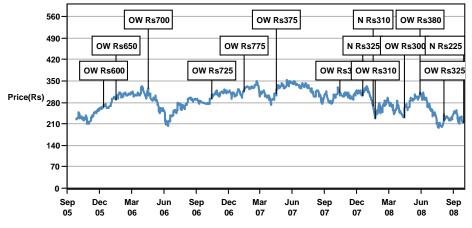
Analyst Certification:

The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report.

Important Disclosures

- Client of the Firm: HCL-Technologies is or was in the past 12 months a client of JPMSI. Infosys Technologies is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service and non-securities-related services. Satyam Computers is or was in the past 12 months a client of JPMSI. Tata Consultancy Services is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service and non-securities-related services. Wipro Ltd. is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service and non-securities-related services.
- **Investment Banking (next 3 months):** JPMSI or its affiliates expect to receive, or intend to seek, compensation for investment banking services in the next three months from Infosys Technologies, Satyam Computers.
- Non-Investment Banking Compensation: JPMSI has received compensation in the past 12 months for products or services other than investment banking from Infosys Technologies, Tata Consultancy Services, Wipro Ltd.. An affiliate of JPMSI has received compensation in the past 12 months for products or services other than investment banking from Wipro Ltd..

HCL-Technologies (HCLT.BO) Price Chart



Date	Rating	Share Price (Rs)	Price Target (Rs)
13-Dec-05	OW	263.62	600.00
18-Jan-06	OW	290.15	650.00
19-Apr-06	OW	325.58	700.00
16-Oct-06	OW	292.30	725.00
16-Jan-07	OW	314.90	775.00
17-Apr-07	OW	308.75	375.00
16-Oct-07	OW	312.95	360.00
19-Dec-07	N	300.50	325.00
18-Jan-08	N	267.60	310.00
23-Jan-08	OW	228.60	310.00
15-Apr-08	OW	230.20	300.00
29-May-08	OW	306.80	380.00
05-Aug-08	OW	220.10	325.00
29-Sep-08	N	212.95	225.00

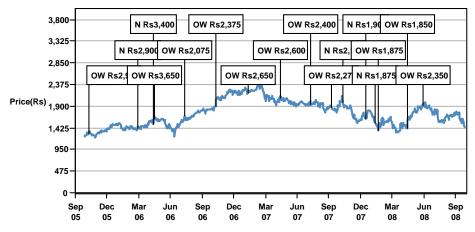
Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.

This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.



Infosys Technologies (INFY.BO) Price Chart



Date Rating **Share Price Price Target** (Rs) (Rs) 11-Oct-05 OW 1311.22 2950.00 01-Mar-06 Ν 1414.30 2900.00 14-Apr-06 Ν 1510.40 3400.00 17-Apr-06 OW 1615.15 3650.00 13-Jul-06 OW 1693.22 2075.00 11-Oct-06 OW 1906.00 2375.00 OW 2183.00 12-Jan-07 2650.00 OW 16-Apr-07 2087.60 2600.00 12-Jul-07 OW 1929.70 2400.00 10-Sep-07 OW 1871.50 2275.00 12-Oct-07 Ν 1976.00 2150.00 18-Dec-07 N 1621.95 1900.00 14-Jan-08 N 1530.20 1875.00 23-Jan-08 OW 1377.55 1875.00 15-Apr-08 OW 1422.45 1850.00 1912.65 2350.00 29-May-08 OW

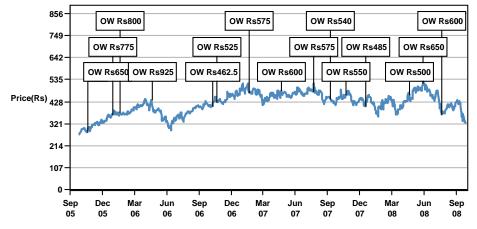
Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.

This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it

over the entire period.

J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Satyam Computers (SATY.BO) Price Chart



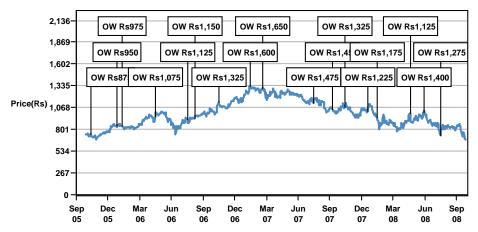
Date	Rating	Share Price (Rs)	Price Target (Rs)
20-Oct-05	OW	278.72	650.00
30-Dec-05	OW	365.70	775.00
20-Jan-06	OW	374.12	800.00
21-Apr-06	OW	435.78	925.00
10-Oct-06	OW	406.15	462.50
23-Oct-06	OW	425.00	525.00
21-Jan-07	OW	472.35	575.00
22-Apr-07	OW	480.65	600.00
23-Jul-07	OW	477.85	575.00
10-Sep-07	OW	442.25	540.00
24-Oct-07	OW	461.75	550.00
18-Dec-07	OW	405.90	485.00
22-Apr-08	OW	458.95	500.00
29-May-08	OW	514.40	650.00
21-Jul-08	OW	367.10	600.00

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.



Tata Consultancy Services (TCS.BO) Price Chart

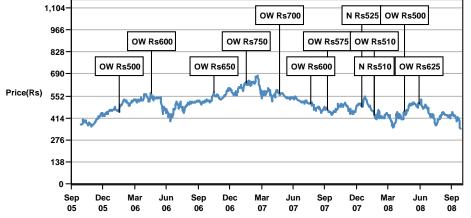


Rating Date **Share Price Price Target** (Rs) (Rs) 12-Oct-05 OW 733.95 875.00 26-Dec-05 OW 835.90 950.00 12-Jan-06 OW 835.82 975.00 17-Apr-06 OW 951.80 1075.00 19-Jul-06 OW 920.88 1125.00 08-Aug-06 OW 936.00 1150.00 OW 16-Oct-06 1130 45 1325 00 OW 15-Jan-07 1325.30 1600.00 21-Feb-07 OW 1297.20 1650.00 16-Jul-07 OW 1127.90 1475.00 10-Sep-07 OW 1046.95 1450.00 15-Oct-07 OW 1073.65 1325.00 20-Dec-07 OW 1021.35 1225.00 16-Jan-08 OW 938 25 1175 00 OW 992.55 21-Apr-08 1125.00 29-May-08 OW 1009.70 1400.00 17-Jul-08 OW 727.35 1275.00

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Wipro Ltd. (WIPR.BO) Price Chart



Date	Rating	Share Price (Rs)	Price Target (Rs)
18-Jan-06	OW	449.25	500.00
19-Apr-06	OW	570.15	600.00
18-Oct-06	OW	574.70	650.00
17-Jan-07	OW	636.85	750.00
23-Apr-07	OW	567.00	700.00
22-Jul-07	OW	505.05	600.00
10-Sep-07	OW	466.95	575.00
17-Dec-07	N	484.60	525.00
21-Jan-08	N	439.80	510.00
23-Jan-08	OW	428.85	510.00
18-Apr-08	OW	459.20	500.00
29-May-08	OW	506.15	625.00

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Explanation of Equity Research Ratings and Analyst(s) Coverage Universe:

J.P. Morgan uses the following rating system: **Overweight** [Over the next six to twelve months, we expect this stock will outperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] **Neutral** [Over the next six to twelve months, we expect this stock will perform in line with the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] **Underweight** [Over the next six to twelve months, we expect this stock will underperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] The analyst or analyst's team's coverage universe is the sector and/or country shown on the cover of each publication. See below for the specific stocks in the certifying analyst(s) coverage universe.

Coverage Universe: **Manoj Singla, CFA:** Atos Origin (ATOS.PA), Autonomy (AUTN.L), Aveva (AVV.L), Capgemini (CAPP.PA), Dassault Systèmes (DAST.PA), HCL Infosystems (HCLI.BO), HCL-Technologies (HCLT.BO), Hexaware Technologies Ltd (HEXT.BO), Indra (IDR.MC), Infosys Technologies (INFY.BO), Logica (LOG.L), MindTree Consulting Ltd. (MINT.BO), Mphasis Ltd (MBFL.BO), Oracle Financial Services Software (ORCL.BO), Patni Computer (PTNI.BO),



Playtech (PTEC.L), Polaris Software (POLS.BO), SAP (SAPG.DE), Sage Group (SGE.L), Satyam Computers (SATY.BO), Software AG (SOWG.DE), Tata Consultancy Services (TCS.BO), Tech Mahindra Ltd. (TEML.BO), Temenos (TEMN.S), TietoEnator (TIE1V.HE), Ubisoft (UBIP.PA), Wipro Ltd. (WIPR.BO), Wirecard (WDIG.DE)

J.P. Morgan Equity Research Ratings Distribution, as of June 30, 2008

	Overweight	Neutral	Underweight
	(buy)	(hold)	(sell)
JPM Global Equity Research Coverage	45%	42%	14%
IB clients*	51%	52%	41%
JPMSI Equity Research Coverage	41%	48%	11%
IB clients*	75%	70%	60%

^{*}Percentage of investment banking clients in each rating category.

For purposes only of NASD/NYSE ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category.

Valuation and Risks: Please see the most recent company-specific research report for an analysis of valuation methodology and risks on any securities recommended herein. Research is available at http://www.morganmarkets.com, or you can contact the analyst named on the front of this note or your J.P. Morgan representative.

Analysts' Compensation: The equity research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues, which include revenues from, among other business units, Institutional Equities and Investment Banking.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of JPMSI, are not registered/qualified as research analysts under NASD/NYSE rules, may not be associated persons of JPMSI, and may not be subject to NASD Rule 2711 and NYSE Rule 472 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Other Disclosures

J.P. Morgan is the global brand name for J.P. Morgan Securities Inc. (JPMSI) and its non-US affiliates worldwide.

Options related research: If the information contained herein regards options related research, such information is available only to persons who have received the proper option risk disclosure documents. For a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options, please contact your J.P. Morgan Representative or visit the OCC's website at http://www.optionsclearing.com/publications/risks/riskstoc.pdf.

Legal Entities Disclosures

U.S.: JPMSI is a member of NYSE, FINRA and SIPC. J.P. Morgan Futures Inc. is a member of the NFA. JPMorgan Chase Bank, N.A. is a member of FDIC and is authorized and regulated in the UK by the Financial Services Authority. U.K.: J.P. Morgan Securities Ltd. (JPMSL) is a member of the London Stock Exchange and is authorised and regulated by the Financial Services Authority. Registered in England & Wales No. 2711006. Registered Office 125 London Wall, London EC2Y 5AJ. South Africa: J.P. Morgan Equities Limited is a member of the Johannesburg Securities Exchange and is regulated by the FSB. Hong Kong: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong. Korea: J.P. Morgan Securities (Far East) Ltd, Seoul branch, is regulated by the Korea Financial Supervisory Service. Australia: J.P. Morgan Australia Limited (ABN 52 002 888 011/AFS Licence No: 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (ABN 61 003 245 234/AFS Licence No: 238066) is a Market Participant with the ASX and regulated by ASIC. Taiwan: J.P.Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. India: J.P. Morgan India Private Limited is a member of the National Stock Exchange of India Limited and The Stock Exchange, Mumbai and is regulated by the Securities and Exchange Board of India. Thailand: JPMorgan Securities (Thailand) Limited is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. Indonesia: PT J.P. Morgan Securities Indonesia is a member of the Indonesia Stock Exchange and is regulated by the BAPEPAM. Philippines: J.P. Morgan Securities Philippines Inc. is a member of the Philippine Stock Exchange and is regulated by the Securities and Exchange Commission. Brazil: Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Mexico: J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is a member of the Mexican Stock Exchange and authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. Singapore: This material is issued and distributed in Singapore by J.P. Morgan Securities Singapore Private Limited (JPMSS) [mica (p) 207/01/2008 and Co. Reg. No.: 199405335R] which is a member of the Singapore Exchange Securities Trading Limited and is regulated by the Monetary Authority of Singapore (MAS) and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore) which is regulated by the MAS. Malaysia: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-x) which is a Participating Organization of





Bursa Malaysia Securities Bhd and is licensed as a dealer by the Securities Commission in Malaysia. **Pakistan:** J. P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan.

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Issued and approved for distribution in the U.K. and the EEA by JPMSL. Investment research issued by JPMSL has been prepared in accordance with JPMSL's Policies for Managing Conflicts of Interest in Connection with Investment Research which outline the effective organisational and administrative arrangements set up within JPMSL for the prevention and avoidance of conflicts of interest with respect to research recommendations, including information barriers, and can be found at http://www.jpmorgan.com/pdfdoc/research/ConflictManagementPolicy.pdf. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction Germany: This material is distributed in Germany by J.P. Morgan Securities Ltd. Frankfurt Branch and JPMorgan Chase Bank, N.A., Frankfurt Branch who are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. Australia: This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. JPMSAL does not issue or distribute this material to "retail clients." The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the terms "wholesale client" and "retail client" have the meanings given to them in section 761G of the Corporations Act 2001. Hong Kong: The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for persons licensed by or registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months' prior.) J.P. Morgan Broking (Hong Kong) Limited is the liquidity provider for derivative warrants issued by J.P. Morgan International Derivatives Ltd and listed on The Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk/prod/dw/Lp.htm. Japan: There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, JPMorgan Securities Japan Co., Ltd., will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between JPMorgan Securities Japan Co., Ltd., and the customer in advance. Financial Instruments Firms: JPMorgan Securities Japan Co., Ltd., Kanto Local Finance Bureau (kinsho) No. [82] Participating Association / Japan Securities Dealers Association, The Financial Futures Association of Japan. Korea: This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Ltd, Seoul branch. Singapore: JPMSI and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Important Disclosures section above. India: For private circulation only, not for sale. Pakistan: For private circulation only, not for sale. New Zealand: This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL.

General: Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMSI and/or its affiliates and the analyst's involvement with the issuer that is the subject of the research. All pricing is as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMSI distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a J.P. Morgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

"Other Disclosures" last revised September 29, 2008.

Copyright 2008 JPMorgan Chase & Co. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan.