J.P.Morgan

India Equity Strategy

Color of Money: Tracking institutional ownership - 2Q

- Special focus Quarterly changes in Institutional ownership: Latest data released for the June 09 quarter indicates that FIIs continue to adopt a more aggressive portfolio stance. Positive global cues and a decisive verdict in the National Elections appear to have buoyed sentiment. Local institutions however have gone defensive over this period. We have been overweight growth cyclicals over the last quarter.
- Investor activity, buoyant over July: Most indicators of investor activity, including trading volumes and value, institutional participation, EMBI spreads, VIX and open interest in the F&O markets, remained positive. Sentiment was aided by better than expected 1Q FY10 results. August is however expected to be relatively light on news flow. Our money flow monitor points to inflows over the month into IT and Consumer sectors and outflows from Industrials and Energy sectors.
- Rates & FX markets: The financial system remains flush with liquidity. But the yield curve continues to shift north, given expectations of a firming up of rates into 4Q CY09. The INR remained flat, despite aggressive portfolio inflows. The trend could be attributed to sustained weakness in trade data and an increase in global crude oil prices. FX markets have also been suggesting substantial US\$ purchases for subscribing into IMF bonds.
- Insider activity. Insiders were marginal net buyers over the month.

Net buy: Kotak Mahindra, Jindal Steel & Power, HDFC Bank, NTPC

Net sell: IDFC, ITC, Axis Bank, Ambuja Cement, Dr. Reddy's Lab.

India Market Strategy

Bharat lyer^{AC} (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com

J.P. Morgan India Private Limited

Bijay Kumar, CFA (91-22) 6639 3016 bijay.kumar@jpmorgan.com

J.P. Morgan India Private Limited

Gunjan Prithyani (91-22) 6639-3093 gunjan.x.prithyani@jpmorgan.com

J.P. Morgan India Private Limited

Emerging and Asian Equity Strategy

Adrian Mowat (852) 2800-8599 adrian.mowat@jpmorgan.com

IS. J.P. Morgan Securities (Asia Pacific) Limited

Sectoral preference and institutions - Ownership changes (Apr 09 to June 09)

| | Sectors in favor | Sectors out of favor |
|---------------------------------|-------------------------------|-------------------------------|
| Insurance Companies | Health Care, Consumer Staples | Consumer Discretionary, IT |
| Domestic Mutual Funds | Consumer Staples, Utilities | Telecom, Health care |
| Foreign Institutional Investors | Financials, Industrials | Consumer Staples, Health care |

Source: Capitaline, J.P. Morgan

See page 19 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.

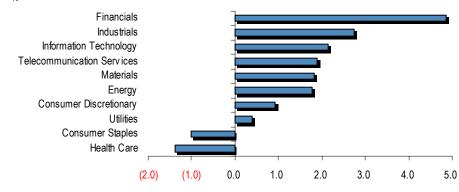
Asia Pacific Equity Research 06 August 2009

Special focus: Tracking Institutional Ownership

FII holding trend

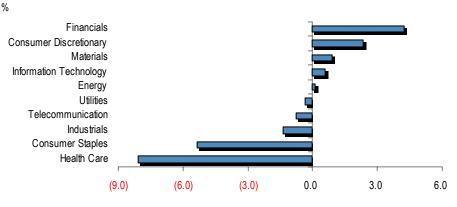
Figure 1: Change in FII Holding (Mar-09 to Jun-09)

%



Source: NSE, MSCI, Capitaline

Figure 2: Change in FII Holding (Jun-08 to Jun-09)



Source: NSE, MSCI, CapitaLine

Table 1: Stocks with significant changes in FII ownership (Mar-09 to Jun-09)

| | Higher holding | Reduced holding |
|----|-------------------------|---------------------------------|
| 1 | Indiabulls Real Estate | Zee Entertainment Entertainment |
| 2 | IDFC | Mahindra & Mahindra |
| 3 | DLF | Glenmark Pharmaceuticals |
| 4 | Jaiprakash Associates | United Spirits |
| 5 | Larsen & Toubro | GMR Infrastructure |
| 6 | Axis Bank | NTPC |
| 7 | Dr Reddys Laboratories | United Phosphorus |
| 8 | Reliance Infrastructure | Abb |
| 9 | Hindalco Industries | Bharat Petroleum |
| 10 | Sesa Goa | Power Grid Corp.Of India |

Source: NSE, MSCI, CapitaLine.

Over Mar-09 to Jun-09, FIIs turned more aggressive in their portfolio stance and increased holdings in Financial, Industrials and IT, while they decreased their holdings in defensive sectors i.e. Health care and Staples

A part of the increase in ownership for key sectors was through participation in QIPs

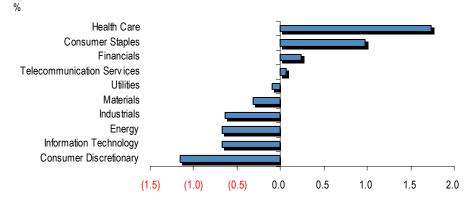
Over the last 12 months (Jun-08 to Jun-09), FIIs increased their holdings in Financials and Consumer Discretionary, and reduced their ownership of Health care and Staples sectors

Insurance Companies holding trend

Figure 3: Change in Insurance Companies' Holding (Mar-09 to Jun-09)

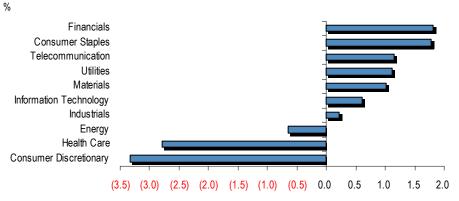
Over Mar-09 to Jun-09, Insurance companies increased their holdings in defensive sectors (Health care and Staples), while they reduced their holdings in Discretionary, IT and Energy sectors

Bharat lyer



Source: NSE, MSCI, Capitaline





Source: NSE, MSCI, CapitaLine

Table 2: Stocks with significant changes in insurance companies' ownership (Mar-09 to Jun-09)

| | Higher holding | Reduced holding |
|----|--------------------------|-------------------------|
| 1 | ICICI Bank | ONGC |
| 2 | HDFC | Infosys Technologies |
| 3 | Power Grid Corp.Of India | Maruti Suzuki India |
| 4 | Idea Cellular | Reliance Infrastructure |
| 5 | Kotak Mahindra Bank | Cairn India |
| 6 | IDFC | Bajaj Auto |
| 7 | Reliance Communications | Bharat Petroleum |
| 8 | Jindal Steel & Power | Tata Power |
| 9 | Steel Authority Of India | Cipla |
| 10 | Hindalco Industries | Hero Honda Motors |

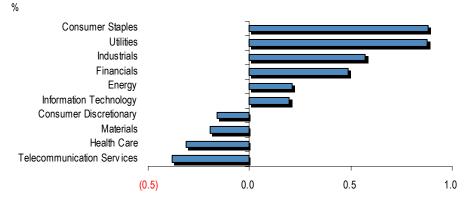
Source: NSE, MSCI, CapitaLine.

Over the last 12 months (Jun-08 to Jun-09), Insurance companies increased their holdings in **Financials, Staples and Telecom** sectors, while Discretionary and Health care sectors witnessed a sharp decrease in ownership

Mutual Funds' holding trend

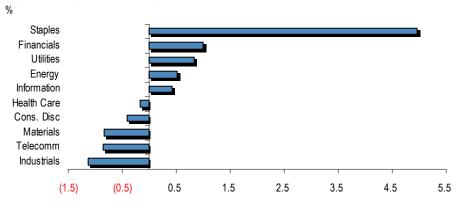
Figure 5: Change in MF's holding (Mar-09 to Jun-09)

Over Mar-09 to Jun-09, MF's increased their holdings in Consumer Staples, Utilities and Industrials, while they reduced their holdings in the Telecom, Health care and Material sectors



Source: NSE, MSCI, Capitaline

Figure 6: Change in MF's holding (Jun-08 to Jun-09)



Source: NSE, MSCI, CapitaLine

Table 3: Stocks with significant changes in MF's' ownership (Mar-09 to Jun-09)

| | Higher holding | Reduced holding | |
|--------------|---------------------------------|--------------------------|--|
| 1 | Indiabulls Real Estate | Axis Bank | |
| 2 | Zee Entertainment Entertainment | Larsen & Toubro | |
| 3 | Jaiprakash Associates | IDFC | |
| 4 | Mahindra & Mahindra | Tata Steel | |
| 5 | Sesa Goa | United Phosphorus | |
| 6 | Hindalco Industries | HDFC Bank | |
| 7 | Reliance Infrastructure | Jindal Steel & Power | |
| 8 Tata Power | | Bajaj Auto | |
| 9 | Reliance Natural Resources | Glenmark Pharmaceuticals | |
| 10 | Cairn India | Hero Honda Motors | |

Source: NSE, MSCI, CapitaLine.

Over the last 12 months (Jun-08 to Jun-09), MF's increased their holdings in Consumer Staples, Financials and Utilities, while they reduced their holdings in Industrial, Telecom and Material sectors

Market Performance

The MSCI India gained 8% over the month



Source: Datastream.

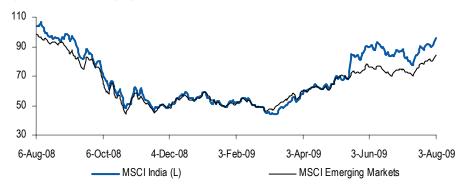
Indian equities underperformed peer group over the month. MSCI India (US\$) gained 8% vs. a gain of 12.8% for MSCI EM

Traded value in equity markets

moderated marginally over the

month

Figure 8: India vs. emerging markets



Source: MSCI, DataStream. Note: Rebased performance of MSCI US\$ indices.

Trading activity

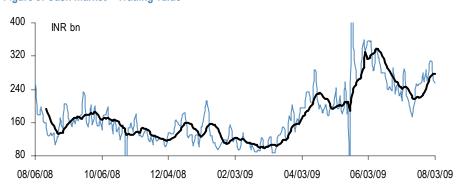


Figure 9: Cash market – Trading value

Source: Bloomberg. Notes: Aggregate turnover of NSE and BSE. Bold line is 10-day moving average.

5

Bharat Iyer (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com Asia Pacific Equity Research 06 August 2009

Trading volumes too moderated over July. Mid Caps however outperformed large caps over the month

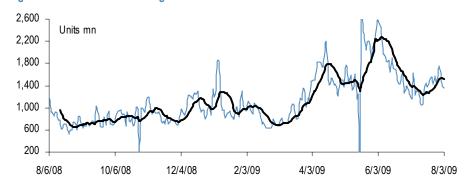
Delivery volumes (20.1%)

declined over the month of June

Average delivery volume for the

last 12 months stands at 20.7%

Figure 10: Cash market – Trading volume



Source: Bloomberg. Note: Aggregate turnover of NSE and BSE.



26 40 30 24 20 22 10 0 20 (10) 18 (20) 16 (30) Junog 980 1982 05200 480.09 P91.09 JU1-08 ¹⁰00 40408 0°000 1311-09 Mat.09 Mayoo Delivery Volume (%) (L) — MoM Sensex Change (%)

Source: NSE, BSE.

.

Table 4: Money flow monitor - July

| Outflow | Inflow |
|----------------------------|------------------------------|
| Reliance Industries Ltd | Infosys Technologies Ltd |
| Oil & Natural Gas Corp Ltd | Housing Development Finance |
| ICICI Bank Ltd | Hindustan Unilever Limited |
| BHEL | Indiabulls Financial Service |
| State Bank Of India | Axis Bank Limited |
| Jindal Steel & Power Ltd | ITC Ltd |
| Sun Pharmaceutical Indus | Zee Entertainment Enterprise |
| Gail India Ltd | Maruti Suzuki India Ltd |
| HDFC Bank Limited | Ultratech Cement Ltd |
| Larsen & Toubro Limited | Tata Power Co Ltd |

Source: Bloomberg. Note: Money flow is sum of daily trade volume * daily price change.

IT and Consumer sectors witnessed inflows, while investors moved out of Energy and Industrials FIIs bought equities aggregating

YTD FIIs have bought US\$7.3 bn

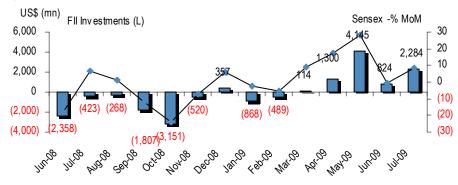
US\$2.3B over July

of Indian equities

Asia Pacific Equity Research 06 August 2009

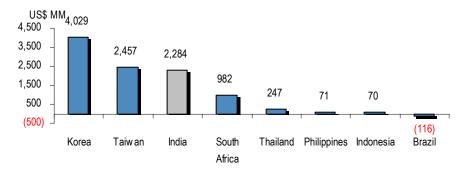
Foreign Institutional Investor (FII) activity

Figure 12: FII investments and Sensex



Source: DataStream, Sebi.

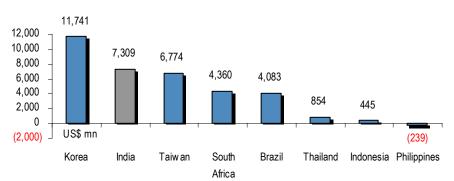
Figure 13: Key emerging markets and FII flows –July



FIIs remained buyers of equities in EMs over July except Brazil

Source: Bloomberg.





YTD, key EMs have seen net inflows, with the exception of Philippines

Source: Sebi.

7

EMBI spreads narrowed further over the month

Lower EMBI spreads typically indicate higher risk appetite and is conducive for EM outperformance

VIX continued to drift lower supported better than expected

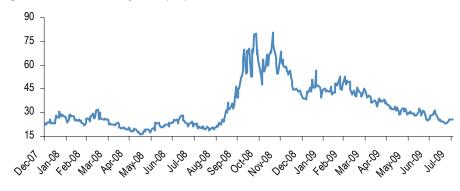
corporate performance and

supportive economic developments

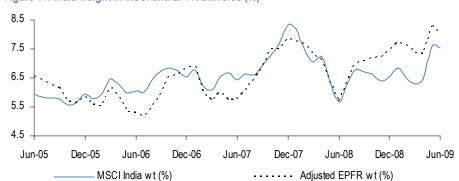


Source: Datastream.





Source: Datastream.





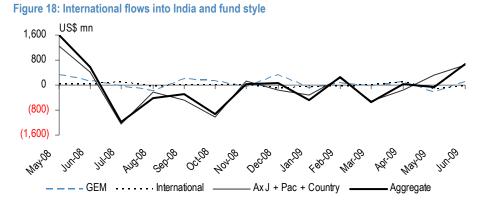
Last available EPFR data for June suggests that foreign investors continue to remain overweight on India in the emerging market universe. The extent of the overweight position has reduced though

Source: MSCI, Datastream, EPFR.

Bharat Iyer (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com

Asia Pacific Equity Research 06 August 2009

GEM and Asia / Country funds were buyers of Indian equities over June, while international fund remained on the sidelines



Source: EPFR.

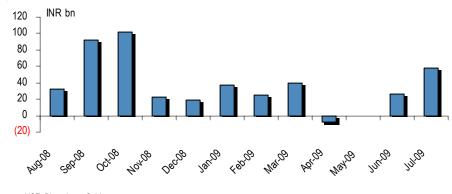
9

Asia Pacific Equity Research 06 August 2009

Domestic institutional investor (DII) activity

Figure 19: DII investments

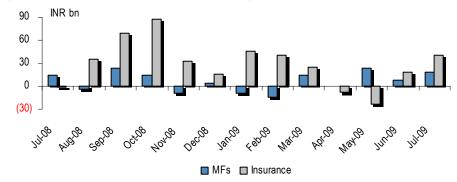
DIIs bought equities aggregating US\$1.2B in July. YTD, DIIs have bought equities aggregating US\$3.6B



Source: NSE, Bloomberg, Sebi

Note - These numbers are based on NSE provisional data.

Figure 20: Breakdown of domestic institutional activity



Source: NSE, Bloomberg, Sebi

Table 5: Life insurance premium and estimated investments in equities

| (INR mn) | Jun-09 | May-09 | Apr-09 | Mar-09 | Feb-09 | Jan-09 |
|---|----------------------|----------------------|----------------------|------------------------|-----------------------|-----------------------|
| LIC | 36,738 | 32,418 | 21,131 | 90,707 | 40,250 | 104,011 |
| Private Sector Cos | 21,285 | 18,107 | 14,885 | 60,202 | 26,550 | 26,426 |
| Industry (YoY growth) | 58,023 -6% | 50,525 -5% | 36,016 30% | 150,909 -28% | 66,799 -24% | 130,437 37% |
| Renewal premium (E) | 63,825 | 55,577 | 39,617 | 166,000 | 73,479 | 143,481 |
| Total Amt | 121,848 | 106,102 | 75,633 | 316,909 | 140,279 | 273,918 |
| @ 25% amt. of first year premium into equities | 14,506 | 12,631 | 9,004 | 37,727 | 16,700 | 32,609 |

Source: Irda, J.P. Morgan calculations

Insurance companies bought US\$826mm of equities. Mutual funds' complemented with net buying of US\$378mm

First-year premia collected by the life insurance sector declined by 6% oya

While LIC reported a growth of 10% oya, private sector declined by a substantial 25% oya

Bharat Iyer (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com Asia Pacific Equity Research 06 August 2009

743

378

176

Sensex -% MoM (R)

30

20

10

0

(10)

(20)

(30)

Local mutual funds bought equities aggregating US\$378mm over the month

YTD, domestic mutual funds have bought US\$842 mm in Indian equities 500 - 500

Figure 21: Domestic mutual fund investments and Sensex

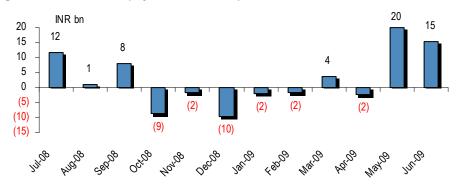
MF Net Buying



Source: Sebi, Datastream.

1,000

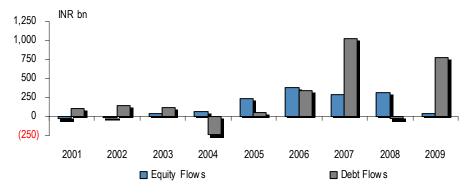
Figure 22: Mutual Funds - Equity funds* net subscription



Source: AMFI.

* - Chart for growth fund only.

Figure 23: Mutual funds – Equity and debt subscription



Source: AMFI. Note – 2009 data is only till Jan-Apr

Inflows into equity MF schemes have increased substantially over the last few months on the back of improved investor sentiment

Subscriptions into debt mutual funds picked up substantially as liquidity remains abundant. Note that liquid-plus (short-term) funds are now classified as bond funds and not liquid funds

Equity Derivatives trends

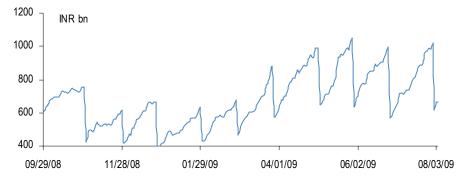




Open interest in options

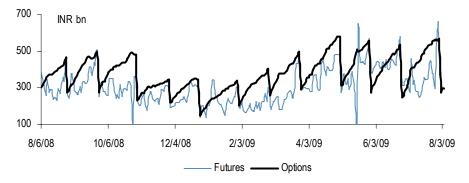
month too

increased marginally over the



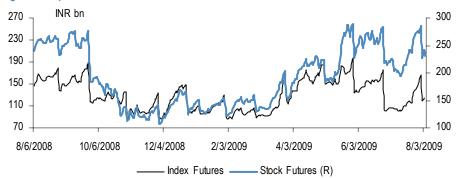
Source: Bloomberg.

Figure 26: Futures and Options - Open interest



Source: Bloomberg.

Figure 25: Open interest - Index and stocks futures



Source: Bloomberg.

Open interest declined marginally in index futures, but remained unchanged for stock futures

Bharat lyer (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com Asia Pacific Equity Research 06 August 2009

Figure 27: Flls in the futures markets- Net buy/sell

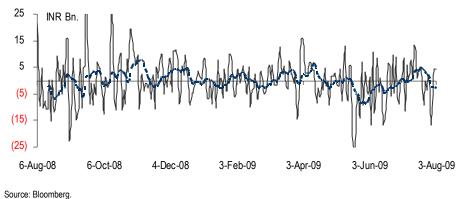
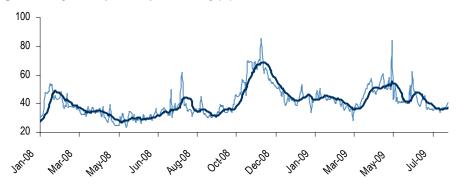
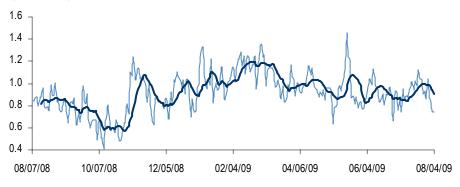


Figure 28: Nifty Index option - Implied volatility (%)



Source: Bloomberg.





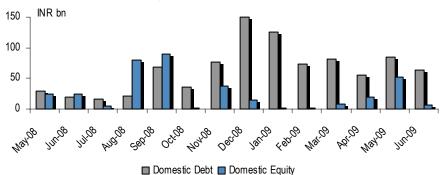
Source: Bloomberg.

FIIs turned net sellers in the futures market towards the end of the month

Implied volatility further declined over the month

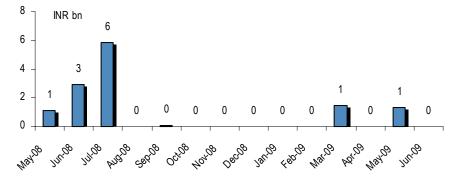
Corporate activity





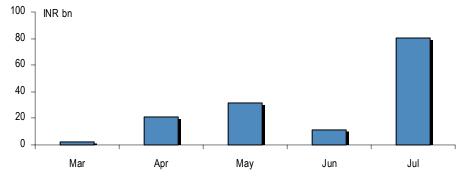
Source: CMIE.











Source: CMIE.

Equity issuances have been picking up over the last quarter, due to improved investor sentiment

Debt issuances also has picked up from April lows

Fund-raising, through international instruments, remains insignificant

Anecdotal evidence suggests that overseas fund raising has picked up substantially in July

Capital raising through QIP (Qualified institutional Placement) remains firm M&A announcements remained

weak over the month of July

Asia Pacific Equity Research 06 August 2009

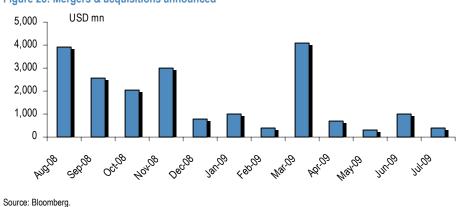
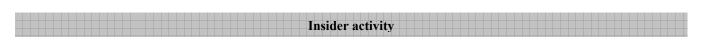
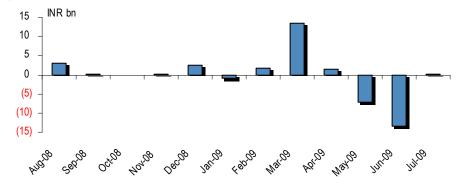


Figure 28: Mergers & acquisitions announced



Insiders were marginal net buyers over the month

Figure 29: Net insider transaction value - MSCI India companies



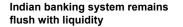
Source: MSCI, Bloomberg, J.P. Morgan.

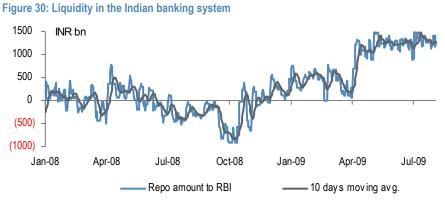
Table 6: Insider net buy / sell – May

| Buy | Sell |
|----------------------|------------------------|
| KOTAK MAHINDRA BANK | INFR.DEV.FINANCE CO. |
| JINDAL STEEL & POWER | ITC |
| HDFC BANK | AXIS BANK |
| NTPC | AMBUJA CEMENTS |
| | DR REDDYS LABORATORIES |

Source: Bloomberg, J.P. Morgan

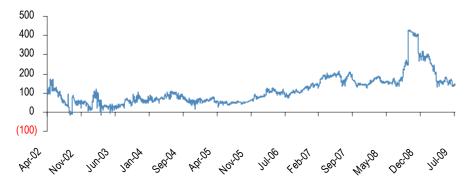
Rates markets





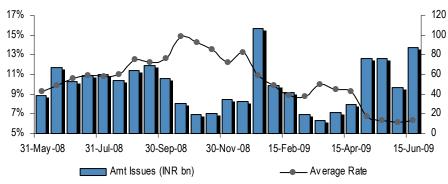












Source: RBI

The spread between 5 year corporate and government bonds continues to ease from peak levels, indicating an improvement in the banking systems risk appetite

Corporate fund raising further picked up during the month

J.P. Morgan expects RBI to keep key policy rates unchanged until 1HCY10. Monetary tightening is expected to begin from 3Q10 with a 25bps in increase in

Our economics team expects the Zero interest rate scenario in the

US to continue over 2009

benchmark rates

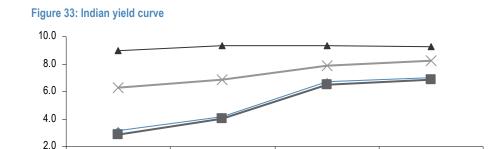
Asia Pacific Equity Research 06 August 2009

10Yr

Table 7: Global interest rate trend

| (%) | Dec-07 | Dec 08 | Current | Dec 09 (E) | Dec 10 (E) |
|-------|--------|--------|---------|------------|------------|
| US | 4.25 | 0.125 | 0.125 | 0.125 | 0.125 |
| Japan | 0.50 | 0.10 | 0.10 | 0.10 | 0.10 |
| Euro | 4.00 | 2.50 | 1.00 | 1.00 | 1.00 |
| India | 7.75 | 6.50 | 4.75 | 4.75 | 5.25 |

Source: J.P. Morgan Economics.



5Yr

Current — -1 Mth — -1 Yr — -3 Yr

1 Yr

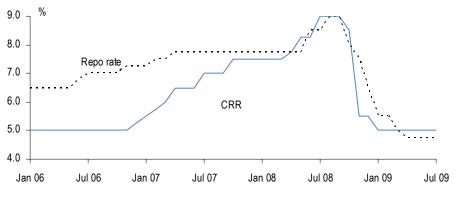
The yield curve shifted north marginally over the month

In the quarterly credit policy, the RBI left the key rates (Repo, Reverse Repo, CRR) unchanged

Since Oct-08, RBI has cut repo rate and CRR by a substantial 425 bps and 400 bps respectively to initially overcome tight liquidity conditions and subsequently to boost growth Source: Datastream.



91 Days

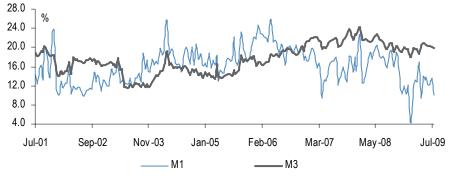


Source: J.P. Morgan Economics.

Bharat Iyer (91-22) 6639-3005 bharat.x.iyer@jpmorgan.com Asia Pacific Equity Research 06 August 2009

Broad money supply (M3) growth remains robust at 19.8%

Figure 35: Money supply growth – M3 and M1 (% YoY)



Source: Bloomberg

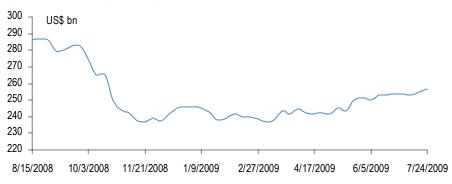
Currency markets

Figure 36: Exchange rate – INR / US\$ 50 47 44 41 25-Aug-08 13-Oct-08 02-Dec-08 20-Jan-09 09-Mar-09 06-May-09 19-Jun-09 04-Aug-09

INR ended the month flat at Rs47.7/US\$

Source: Bloomberg





Source: Bloomberg.

Foreign currency reserves increased by US\$3bn over the month

Asia Pacific Equity Research 06 August 2009

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

• **MSCI:** The MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an 'as is' basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates.

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.] **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 is 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: **Bharat Iyer:** Ashok Leyland (ASOK.BO), Bajaj Auto (BAJA.BO), Hero Honda (HROH.BO), Mahindra & Mahindra (MAHM.BO), Maruti Suzuki India Ltd (MRTI.BO), Tata Motors (TAMO.BO)

| | Overweight | Neutral | Underweight |
|-------------------------------------|------------|---------|-------------|
| | (buy) | (hold) | (sell) |
| JPM Global Equity Research Coverage | 36% | 46% | 18% |
| IB clients* | 55% | 56% | 42% |
| JPMSI Equity Research Coverage | 36% | 52% | 12% |
| IB clients* | 77% | 72% | 60% |

J.P. Morgan Equity Research Ratings Distribution, as of June 30, 2009

*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 <u>http://www.morganmarkets.com</u>, 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.

Asia Pacific Equity Research 06 August 2009

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 Bombay Stock Exchange Limited 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) 132/01/2009 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 Berhad and a holder of Capital Markets Services License issued 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. Saudi Arabia: J.P. Morgan Saudi Arabia Ltd. is authorised by the Capital Market Authority of the Kingdom of Saudi Arabia (CMA) to carry out dealing as an agent, arranging, advising and custody, with respect to securities business under licence number 35-07079 and its registered address is at 8th Floor, Al-Faisaliyah Tower, King Fahad Road, P.O. Box 51907, Riyadh 11553, Kingdom of Saudi Arabia.

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Unless specified to the contrary, 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 arising as a result of publication and distribution of investment research. Many European regulators require that a firm to establish, implement and maintain such a policy. 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. 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. Germany: This material is distributed in Germany by J.P. Morgan Securities Ltd., Frankfurt Branch and J.P.Morgan Chase Bank, N.A., Frankfurt Branch which are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. 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: JPMSS 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 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 January 30, 2009.

Copyright 2009 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.